

ANGLIA RUSKIN UNIVERSITY

FACULTY OF ARTS, LAW AND SOCIAL SCIENCES

CAMBRIDGE SCHOOL OF ART

**A QUALITATIVE INVESTIGATION TO DEVELOP INTERIOR DESIGN PEDAGOGY
THAT FOSTER STUDENTS' CREATIVITY**

ROBA ZAKARIAH SHAHEEN

A thesis in partial fulfilment of the requirements of
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Dedication:

ALLAH

then

Mama and Baba, Tariq, Omar and Abdullah

Acknowledgments:

I wish to express my gratitude to everyone who helped me on this journey. Thank you Allah for giving me life, power, passion and the capability to accomplish this mission. Thank you Allah for giving me all the best...

Thank you Allah for giving me the best parents in the world, Wafaa Yaseen Zaitooni and Zakariah Mohamad Shaheen. My parents taught me to be a strong believer and gave me the courage to pursue my dreams. They taught me that knowledge is the path to paradise in this world and in the afterlife. My loving parents taught me that to be human is to serve humanity. They showed me to love is the greatest power possible and it is the key to success in all aspects of life. It is through their love for me that I have become the person I am.

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ABSTRACT

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**A QUALITATIVE INVESTIGATION TO DEVELOP INTERIOR DESIGN PEDAGOGY
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This research seeks to develop interior design education by building a new pedagogical theory and practice that helps educators to foster students' creativity. A new paradigm has been developed to determine students' personality types inspired by Myers Briggs Type Indicators. This research focused on creativity as a personal characteristic because creativity is a fundamental quality required by all interior designers.

The methodology adopted was a qualitative research approach using the Grounded Theory research paradigm to build an independent theory and practice in the field. Ethnographic observation in studios across three higher education institutions was the first method of collecting data. The focus was to observe students' interactions, attitudes and behaviours with educators and peers, in order to understand the dynamic of the studio culture from different perspectives. Semi-structured interviews were the second method used to collect detailed explanations from the twenty-three participating students' regarding their perceptions, personality types, and thinking styles in relation to creativity. Ten participating educators were interviewed on their perceptions of studio strategy, students' creativity, and design thinking. Constructive interpretive analysis was used to analyse the data thematically and holistically in relation to the research aims and questions.

The findings show a significant relationship between personality type, thinking style and creativity, which has great potential for pedagogical development. Building from this empirical finding, a new theory is adumbrated named: Personal Thinking Creative Design Theory. This emphasises the notion that creative designing (product or process) is based upon the individual designer's qualities (personality type, thinking style and implicit meanings and values). Based on this theory, a pedagogical model is proposed that can be used creatively by interior design educators to help them understand their students and thereby foster their creativity.

Key words: Interior design, pedagogy, creativity, qualitative research, Grounded theory and personality differences.

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Section 1. The Research Context

1.1 Introduction

This research is focused on developing the pedagogy of interior design, specifically students' creativity. This introduction chapter will provide the rationale and a brief, broad view of the context of the research. It will highlight five key aspects: the contradiction I experienced as both a student and educator of interior design which is the reason for conducting this research, perceptions and assumptions, the research gap, the research question and aims, and finally the conceptual framework.

1.2 The Contradiction

As a student, I graduated from the interior design department of King Abdulaziz University in Saudi Arabia. I then held an academic position as a junior educator in the same institution. This has allowed me to experience two positions in the same setting and two perspectives on the same situation, which to my mind, has uncovered a contradiction. As a student, I remember forming subjective opinions and assumptions from my experience studying interior design. I even felt confident enough to have some ideas and recommendations for educators to teach us better. Tacitly, I used to say "if I were a tutor I would do this; I would say this instead of that" Then, I became a tutor. I had not expected to become an educator so soon. Suddenly, I lost my confidence and forgot all the recommendations I had made while a student. As an educator, students all seemed so different to each other, with different personalities and opinions. I was shocked when students behaved differently and I had to deal with them, teach them, and guide them, as it is was my responsibility to enhance their learning outcomes. This made me start questioning myself: why were they talking or behaving this way? Why were their reflections and responses to the same teaching and learning process so different, varying from one student to another? How should I communicate with them? Which teaching or learning strategy should I use? Then I panicked. I was eager to be an excellent educator who is able to give all my abilities to teaching and helping students to attain the best learning outcomes. I want to help all my students to achieve their goals to be the interior designers they wish to be. From that moment, I decided to search for answers to all these

questions and to become a tutor who could foster students' creativity in the domain of interior design.

Personally, I value quality and I appreciate working toward perfection. Thus, I decided to improve my knowledge and skills in teaching to reach the highest standard I could reach. I started reading different texts: books, articles and journals about education strategies and art and design pedagogy. This gave me an overview of teaching methods that had been tried and applied. However, the literature was overwhelming and it would take a long time to verify and choose the most appropriate pedagogical strategy to apply in my personal teaching practise, as it would need to be experienced and the outcomes evaluated specifically within the interior design domain.

It should be noted here that most of the work on interior design pedagogy is from the art and design domain. Interestingly, all sources are positive about the significance of creativity and its mysterious nature. A substantial amount of the literature has attempted to discuss creativity to better understand whether it is an individual intrinsic talent or if it is a potential to be developed; in essence, if it is nature or if it can be nurtured.

I became aware of the fragmented and fluctuating situation facing educators in choosing a teaching strategy. Educators aim to satisfy students' learning experience, develop their knowledge and skills, and foster their creativity, but there are no clear guides to the pedagogical strategies which should be followed to achieve these aims. As will be discussed in the following chapters, interior design educators often attempt a trial and error approach, which can be successful with some students and fails with others. My question then, was what kind of strategies were educators choosing to use in their teaching practise?

From that moment on, I decided to dedicate my PhD to investigating the theoretical and practical pedagogical strategies in interior design discipline. Fostering creativity is the main quality that will be focused on through this research. The outcomes of this research should help educators in interior design to teach more effectively and thoughtfully, and to

maximise students learning capabilities. This research may also be beneficial to educators in art and design.

1.3 The problems of interior design pedagogy

“Interior design” is a modern term representing a modern profession worldwide that is historically rooted in “architecture” and “interior decoration”, as Jeannie Ireland (2009) stated in her remarkable book, *History of Interior Design*. She noted that interior design as a profession was constructed as a result of exchanging issues and ideas through different domains, such as architecture, furniture, décor and interiors. Since then, it has evolved in the twentieth century as a remarkable modern profession that attracts significant attention (Pile, J.F., 2000, Massey, A., 2001, Guerin, D.A. and Martin, C.S., 2004, Dodsworth, S., 2009, Harwood, B., 2013, Cunningham, E., 2014). The educational programs for interior design have rapidly developed professional practices (Guerin, D.A. and Thompson, J.A.A., 2004, Harwood, B. and Dohr, J.H., 2015). The first established programs had to borrow pedagogical theories and practices from existing architectural programs and interior decorating domains. Pioneering interior design educators took the initiative to construct an independent body of knowledge and fill the gap in the educational domain. While the emergence of interior design educational programs was considered a step forward, soon several issues appeared in the field requiring urgent attention. The first issue was the absence of distinct boundaries between the three domains: interior design, interior decoration and architecture. Conflicts emerged in the practical field due to overlaps and confusion between these three theoretical and pedagogical bodies of knowledge (Pile, J.F., 2000). The second issue was the growing complexity of the interior design accreditation standard, due to the increasing content included in interior design courses. Although educators had no clear criteria to follow in their teaching practices, as architectural educators did for example, they were trying to squeeze as many challenges as possible into studio courses (Guerin & Thompson, 2004). Being a new and therefore ‘open’ profession, it is questionable whether accommodating desirable values and principles without careful and rigorous review brings flexibility or vulnerability. The third

issue involves the pedagogy of interior design itself, which has not been given enough attention until recently and is still in need of thoughtful research-based evolution. And finally, there is a lack of academic attention in the field. Currently, there is a very limited volume of research, especially at postgraduate level, concerning interior design pedagogy, which is key to tackling all the previous issues thoroughly. Therefore, interior design education requires profound academic scrutiny to rigorously investigate, verify and build up the body of knowledge (Ireland, J. 2009).

1.4 Research Gap

Although the interior design industry and practice are developing rapidly, interior design pedagogy is developing gradually. This situation has created a gap between the education and the practice in the domain that needs to be tackled. The following quotation shows the degree of ambiguity in the vision of interior design education and the studio dynamic more precisely:

“I suggest that not only is design teaching not actually representative of the interior design acts within the profession but that quite often interior design teachers and professors are unaware of the dynamics and negotiations that occur in both the profession and the design studio environment”

(Poldma, 2003:16).

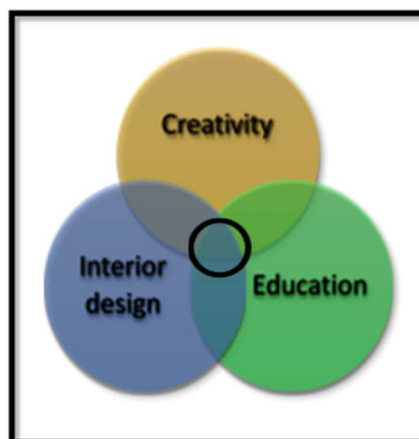


Figure 1: the scope of the research is the overlapping area between interior design, education and creativity.

According to Professor Margret Portillo, 2002 and John I. Dickinson, *et al.* 2012, the vast majority of interior designer graduates prefer to practice the profession than teach in the academic domain. Those who do choose an academic career follow the pedagogical practices adopted by their educators, adding their own personal stamp to courses and training. There is limited direct critique of the current pedagogical practices in interior design education, however, there is growing attention to the area by educators and scholars in the domain. One of the areas in interior design pedagogy that needs further research is fostering creative abilities and thinking among students through education. As “creativity” is a fundamental term in the discipline, it is what this research will focus on conceptually in relation to education and interior design (Figure 1).

1.5 Research Aim and Question

This research aims to develop pedagogical theory and practice in the field of interior design through understanding and explaining current pedagogical practices and identifying a neglected area that shows promising potential to offer new possibilities for developing pedagogical practice in the interior design studio. This new potential will enable educators to foster all student creativity simultaneously, while considering the individual differences of each student. Thus, my research question is:

How can interior design pedagogical theory and practice be developed in order to foster all students' creativity?

I have chosen to limit my study to interior design Bachelor programmes because this stabilises the theoretical backgrounds of the participating institutions. In other words, it keeps the research focused within the same theoretical framework across all institutions to determine the validity of the data. If different kinds of institutions had been included, it would have made it difficult to judge whether differences in studio culture, student perceptions and project tasks were due to differences in the theoretical background or the direction of the institution.

The criterion of Bachelor of Art (BA) level has been chosen in order to control the data in three ways: to ensure that the participating students study interior design to a professional degree and are not just taking a short course out of curiosity; to tap into a larger body of students (there are more BA students than postgraduate and diploma students in interior design programmes in higher education institutions in the UK (UCAS 2014)); and focusing on the transitional bachelor degree means accessing intermediate level education.

1.6 Conceptual Perspectives

There are three concepts in this research: interior design, education, and creativity. The model below visualizes how these three elements interact and correlate with each other to articulate a research scope intrinsic to the three perspectives. As stated earlier, interior design is the primary concept at the heart of this research. It requires development in pedagogical practices to bring rigours to the field professionally. The discipline is expanding in regards to the number of students, public attention, and business revenues. This flourish therefore, requires academic and practical attention, as will be explained in the following chapters. The second concept, education, is perceived as the nexus to developing pedagogical and professional practices that will further the interior design field. Just as the market and industry sectors will benefit from an involvement by academia, Pedagogy will benefit from insights from the field. The third concept is creativity, which is fundamental to the interior design discipline and to the current interior design economy as well. Creativity, as problem solving or developing new and original concepts, is favourably considered in the both interior design practice and the business of interior of design. While texts and resources in interior design education are limited, the focus for the majority of these existing texts and resources has been on creativity. Likewise, with all other disciplines, like fashion design and graphic design, in the creative industries/design industry , creativity has been a focal point in the research and development, as will be discussed briefly in the following

literature review. These three concepts, then, form the core of this research and will be developed further in this thesis.

1.7 Conceptual Framework

The conceptual framework of a study is the basis of the research. This research aims to develop interior design pedagogy through educational practices in order to foster students' creativity. Figure 2 shows the relationship between the three aspects: interior design, education and creativity. It also presents the research gap in the yellow square, which is the spot this research aims to investigate.

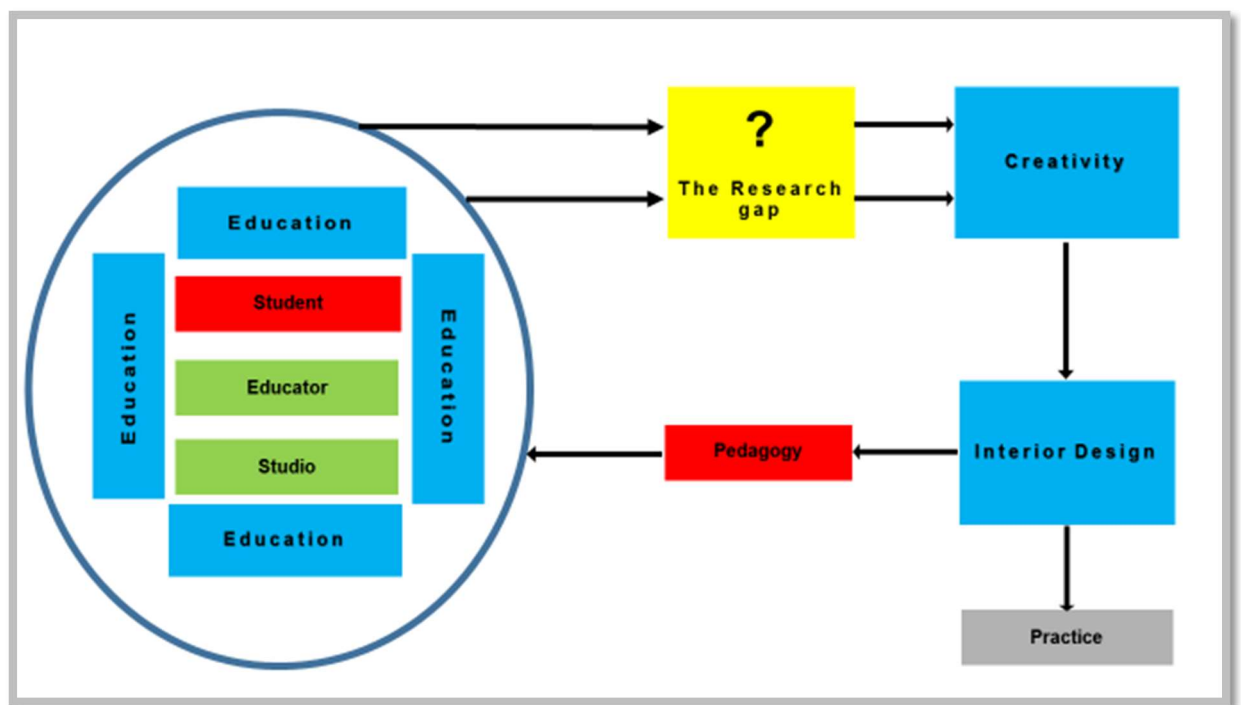


Figure 2: the conceptual framework of the research and the research gap.

Chapter 2: An Overview of the Literature

2.1 Introduction:

This section will provide a brief historical context of the interior design profession. It will present the discourse between the architectural and interior decorating professions, and the debate around the emergence of interior design as a new profession. Then, it will provide a general view of the contemporary situation of the profession of interior design.

2.2 A Story of a Profession: Interior Design is Bridging the Gap between Architecture and Interior Decoration

In the last five decades, the profession of interior design has officially emerged in the market and it has developed through different phases in history to become the thriving practice we have today (Hinchman 2013). The phases of development have bounced between two professions: architecture and interior decoration. Thus, this chapter will focus on these two professions in a twentieth century context, and several key texts will support the discussion. An important book written by Anne Massey (2001), Professor of Art History at Kingston University in London, entitled *Interior Design Since 1900* will guide this section. This book collects the fragmented historical information in the literature related to interior design across multiple disciplines. It provides a coherent narrative of the profession with logical explanations of how it emerged. Critically, Massey shows how interior decoration and architecture were two independent professions at the beginning of the twentieth century. Moreover, she emphasises that interior design did not exist before the 1950s and 60s, while its emergence into the market was due to modern social demands (Massey, A., 2001).

In the beginning of the twentieth century; modernisation, urbanisation, and industrialisation had accelerated and architecture and interior decoration flourished (Sparke, 2008). Architecture developed due to the rapid increase of housing demand for workers' families in the expanding modern cities (Marwick, 2003). These rapid architectural and urbanising movements neglected some crucial aspects in the social context, which caused several

issues. For example, the clean lines of Le Corbusier, a key figure in the architectural domain who led the transition toward modernity in the twentieth century, led to depression. Characterised as functional, simple with clean lines and plain cement floors, Le Corbusier predicted the profusion of high-rise apartment buildings, which at that time, were perceived as a genius solution for the housing shortage. However, his architectural style was received negatively by people who lived in these homes and apartments, as the interiors were left white and plain (Apollo, 2012). Society perceived his style negatively for its loss of the personal touch and the sense of home. According to Nigel Cross (2011), a British educator and researcher in design, Le Corbusier's metaphor of a house was a "machine for living" which emphasised his conceptual design that valued the science of design, rationality of decisions, and functionality of space.

From another perspective, feminism was a rising issue in this area. At this time, architecture was a male-dominated profession that highly appreciated the representation of logic and rationality. Discussing interior design and feminism, Lucinda Kaukas Havenhand in her article *A View from the Margin: Interior Design*, stated that Le Corbusier at first refused to employ Charlotte Perriand, a female interior designer in his studio, when he famously said "we don't embroider cushions here." Such incidents were considered challenges that delayed the emergence of the interior design profession, and were strong motivation for the professionalization of the discipline. Despite the growing popularity of interior design among society, it was struggling for an identity, suffering an inferiority complex, and seeking legitimacy as a profession (Havenhand, 2004).

After the Second World War, huge challenges were facing governments and communities in the UK and across Europe. The housing issue was at the top of this list, as providing appropriate housing for all families after the war was a catastrophic problem. People wanted proper homes with all the modern conveniences, services, equipment, and furnishings that were being advertised and publicised. The public was seeking a modern life style to make everyday life easier, not to obtain classic decorative elements and style. Despite this, a considerable number of people had a tendency for aesthetic value, and the

Do It Yourself (DIY) phenomenon began a trend for an easy way to apply decoration to the home. The market responded well to this trend by providing the merchandise, materials, tools, and products for ordinary people to achieve their decorating goals. However, the results of these non-professional practices were often chaos.

The perspective from the interior decorating profession was different. Historically, decoration, domesticity, and femininity were seen as the pillars of interior design. Ann Massey described how Elsie de Wolfe was the first interior decorator to embrace the profession in the market in the USA in the period 1865–1950. Following this, several female interior decorators, notably Ruby Ross Wood and Dorothy Draper, embraced the field. Their services were mainly focused on domestic decoration and selling artistic elements to add aesthetic value to interiors. Socially, interior decoration was an accepted profession for women insofar as it was perceived as akin to housewives' traditional housework, with a touch of elegance and class (Turpin, J., 2007). As a result, many women decided to become interior decorators as their experience revealed personal interest, and a special ability to provide aesthetic taste to a place (Pugh, M., 2012).

A masters dissertation by Manli Zarandian in the Architecture School University of Nebraska-Lincoln, discussed femininity and interior design in 1960s. The thesis demonstrated how the profession was dominated by women and was strongly linked to the feminist movement (Zarandian, 2015). It emphasised that the professionalization of the interior decorating discipline was developed by women. With time, the mood changed and the discipline transitioned to become the interior design profession. Perhaps unsurprisingly, the credit for males in architecture and interior design were highlighted more than for women in texts and history books.

This brief overview presents the context behind the development of the profession of interior design. It shows how the three professions have overlapping elements and values and how interior design emerged to cover a gap between architecture and interior decoration. As Lucinda Kaukas Havenhand described the relationship between the three professions:

“The boundary between architecture and interior design remains in place, held there by a persistent idea of difference between the two fields: male vs. female, structure vs. decoration, and superior vs. inferior.” (2004, p.33).

To sum up, the problematic housing situation resulting from architectural practices, and the non-professional decoration practices have positively contributed to the emergence of interior design as a profession in the 1950s. As a profession, interior design focuses on designing and solving issues in the interior spaces of new or pre-existing buildings, considers the value of functionality (from the perspective of architecture) and the value of aesthetics (from the perspective of decoration) according to the end user's tastes.

2.3 What is the interior design profession?

As mentioned earlier, interior design is a modern field that fills the gap between two professions – architecture and interior decoration. This section will discuss interior design as a profession in the creative industry and as a subject in education, and compare development in both sectors.

Currently, interior design is a modern profession that flourishes in the industrial and business sectors (Poldma, 2008). The IBIS world organisation has published a report (2016) focused on the following subjects in the industry; graphic design, interior design, fashion design, and industrial design in the United Kingdom. This report emphasised growth occurring in these sectors since 2012, which is the main reason for publishing this report very recently. The report presented valuable statistics on the specialised design activities in the industry for the year 2016-17. At present, the industry revenue is £6.3 billion, with an estimated annual growth of 3% for the period covering 2017- 2022. This indicates that the industry revenue will expand over the next five years to reach £7.3 billion. The industry represents 21,344 businesses holding £1.3 billion as wages, and making £1.2 billion in profit for the sector. The report mentioned the links between the four professions and how they influence each other.

Interior design accounts for 36% of this creative industry, and it is highly sensitive to construction growth. Household, commercial, or other public construction, including planning for renovation and refurbishment, increase the demand for interior design services. This is particularly important for the hospitality sector, shopping centres, restaurants and public buildings. It is common practice for architectural companies to contract with interior design firms for their services. The data in this report is evidence that supports the demand by the market for further research and consideration of the subject of interior design (IBIS world, 2016).

As a subject in education, interior design still calls for legitimacy, clearer rules and values that characterise this “non-supplementary profession” (Havenhand, 2004). In 2015 The British Institute of Interior Design (BIID) celebrated the fiftieth anniversary of the annual conference, “WHO DO WE THINK WE ARE?” This conference provided excellent evidence in support of my thesis and validated my own thoughts on the profession, as I will describe. The conference sessions summarised fifty years of the development of the interior design profession. They emphasised the currently accepted notion that interior design is a multifaceted profession bridging several fragmented and disjointed professions. The talks highlighted the role of interior designers, as spatial planners: artists, engineers, managers, psychologists, psychotherapists, decorators and architects, among others (Hopwood, Massey et al. 2015). Moreover, Daniel Hopwood (2015) highlighted the main challenges facing the profession, which are: sustainability, business stability, and social and gender equality. Interestingly, education and scientific research were identified as key tools to tackle these issues and propose thorough solutions for the design segment. This statement leads to a theoretical discussion about the “scientific design” movement.

As Nigel Cross mentioned in his paper, “Designerly Ways of Knowing: Design Discipline versus Design Science,” Scientific Design is a movement concerned with criticality, investigating how scientific knowledge and logical methodologies can enhance the value of design and design disciplines. He stated that there were two similar movements in 1920s and 1960s, and he expected that in the twenty-first century this criticality will

emerge again due to the modern spirit which opposes the speculative nature of the arts, and values scientific methods and knowledge (Cross, 2001; Van Doesberg, 1923). In his paper, Cross discussed several theories and current debates on the importance of design education and conscious reflection by practitioners on their practices, independently and in relation to other sciences, for professional context.

As discussed in the previous chapter, architecture, a discipline that developed scientifically in the nineteenth century, is strongly linked to interior design. Contrary to this view, interior design is also perceived as an advanced version of interior decorating, which is a discipline in the arts sector. The conflict between science and arts, logic and intuition, research and instruction is the root of the confusion of the profession. Lucinda Kaukas Havenhand states, "Interior designers do understand that they have a problematic and often misunderstood identity, although they have worked diligently over the past fifty years to identify and legitimize their field." (2004, p.33).

From one perspective, interior design is a profession developed within the architectural domain. John Pile emphasized, "interior design is inextricably linked to architecture and can only be studied within an architectural context" (2005, p. 11). This statement underpins the perception that interior design is undeniably part of architecture, as architecture concerns the construction of buildings and their interiors. He argued that interior design and architecture are two professions that complement each other to achieve a high standard of quality for the built environment.

From another perspective, interior design is a profession developed from the interior decorating domain. Denise Guerin and Jo Ann Thompson claim the interior design profession-"...has evolved from one predominantly concerned with surface ornamentation to one based on designing for human behaviour" (2004, p. 1). This statement emphasises the core shift in the conception of the profession, from one of treating interiors as an objective place, to seeing interiors as utilised by humans. In other words, interior decorating is a profession concerning ornamental features of a place, whereas interior design is a profession that is concerned with how users live in and/or utilise a space

effectively. Most importantly, the notion underpinning their statement is that interior design is a transformed extension of interior decoration.

Each perspective has followers and supporters, which has led to the contested situation of the profession. I believe that interior design is a multifaceted profession linked to an array of professions, namely, architecture, interior decorating, textile design, product design, and lighting design, among others. Interior designers are professional practitioners whose job it is to make particular spaces respond to individual users with distinct preferences and needs using specific resources. Some practitioners are specialised in specific areas; for example; merchandising designers, residential designers, medical designers, restaurant and hospitality designers. This wide variety of specialisation provides a wide variety of jobs in the market, as well as at the same time, working collectively with other professionals and craftsmen to achieve professional standards. In other words, interior designers are conductors of an orchestra, guiding suppliers to produce harmonised interiors.

Because of these dual perspectives, there has been limited scientific and academic research to establish independent knowledge of the profession (Clemons and Eckman 2011). As will be discussed later in the methodology chapter, this epistemological conflict is one of the things that hinders the development of both the scientific logical positivist approach-and the experiential intuitive constructivist approach, because both positions criticise the other. As a result, there has been an urgent call from top educators and scholars in the field to establish and develop a theoretical and professional framework for the discipline, independent of architecture and interior decorating. The following section will discuss the theorists from within the social sciences who have established the foundation for the development of this research. After which, the theoretical body of knowledge of the interior design discipline will be discussed.

2.4 Summary

Section 2 has provided a brief explanation of the interior design profession and its development, presenting a snapshot of the profession and the theoretical tensions in relation to other professions. Chapter 1 discussed how interior design emerged in the twentieth century, and the factors that influenced it, including the problematic housing situation resulting from architectural practices, and the non-professional decoration practices. This chapter started by explaining the two perspectives on interior design, that of architecture and interior decorating which are the primary disciplines to influence the subject of interior design holistically. This was followed by a discussion of the confusion surrounding the profession, by practitioners and the public alike. An analysis of the reasons for this confusion has highlighted the influence of modernism, industrialisation, and feminism on the development of the profession. Chapter 2 discussed the current situation of the profession, and the recent growth in business and industry. It presented the theoretical tensions which continue to confound the practice, as ambiguities remains between the boundaries of architecture, interior decorating, and interior design, both in practice and in education. Section 3 will discuss the twentieth century theorists who have influenced this research and the interior design profession.

Chapter 3: The Main Educational Theories that Underpin the Art and Design

Movement

3.1 Introduction

“Education is the most powerful weapon which you can use to change the world”

Nelson Mandela

As discussed in earlier chapters education is the hope to solve many problematic issues in the interior design domain, on different levels. It will enrich the body of knowledge and the understanding of cultural and social influences in relation to the discipline. And education is the key to developing pedagogical theory and practice, and encouraging the discipline to thrive holistically (Novak 1977, Burbules 1986, Lindeman 1989, Stromquist, Monkman 2014).

This section will discuss four pioneering theorists whose thoughts and theories underpin (either directly or indirectly) the teaching and learning strategies in art and design in general, and interior design in particular. The four theorists are John Dewey, Lev Semenovich Vygotsky, Donald Schon and David Kolb. They have been chosen because their educational theories and models interweave and build upon each other creating a constructive matrix or framework for this research. Dewey whose theory that learning is a social process where individual learn based on experimental experience, made him the father of progressive education. Vygotsky's theory, developed independently of Dewey's, focused on the area of creativity specifically. He studied the influence of social interactions on individual creativity through the learning process. Schon built his theory of Reflective practice upon Dewey's theory. He focused on consciousness as the core element in the learning experience. Whereas, Kolbe took Dewey's theory to another level of conceptualisation by creating a typology of learning processes and styles. Kolb's experimental theory of learning is the principle pedagogical theory adopted in the interior design domain (Clemons and Eckman). Thus, the choice of these theorists is based on these characteristics, and follow in a line from Kolb to Schon to Vygotsky to Dewey, whose theory was the basis for others.

3.2 John Dewey's Theory: learning by experience

“Education is a social process; education is growth; education is not preparation for life but is life itself”

John Dewey

John Dewey was an American psychologist, educationalist and philosopher who lived from 1859 to 1952. Dewey is widely recognised as the founder of the education and experience theory, and progressive education movement and democracy. One of the most widely-cited texts on this subject is *Experience and Education* (1938), which articulates his theories of education. Dewey criticised the traditional, rigid education system that focused on attaining concrete knowledge. He encouraged a focus on individuals' learning experiences, and encouraged educators to find the appropriate teaching style that responded well to the personal abilities and characteristics of the individual.

His main thesis in education was that experience is the lens through which people interact with their environment in an informative way, linking actions with thoughts (Beard, C. and Wilson, J.P., 2006). This meant that students would be more motivated to study and thrive in an environment where they could experience and interact with the learning objectives. He encouraged educators to provide the opportunity for all students to take part in their learning process. Moreover, he considered it important to provide this opportunity in the educational environment (i.e. the classroom), which Dewey felt was the social setting in which students would learn.

Furthermore, he emphasised the idea that learning should be an individual experience in the classroom, addressing personal differences and achieving learning objectives for all. As the learning process relies on experience, students' previous experiences that have constructed their personality and individual differences should be part of the mix. Thus, it is more profound to provide a learning style to address students' needs individually.

3.3 Lev Semenovich Vygotsky's Theory: creativity between social development and individual consciousness.

Lev Semenovich Vygotsky was a Russian theorist, psychologist, sociologist and educationalist, who lived from 1896 to 1934. Despite his early death from tuberculosis, he significantly contributed to the field of education with theories about both learning and psychology. He lived through both the 1905 and 1917 Russian revolutions, and his support for socialism conflicted with the autocratic Tsarist regime. This was a time when individuals or groups opposed to the government were simply executed.

Living through such dangerous and chaotic times greatly influenced Vygotsky's theories of art, psychology, creativity and learning. As a result of these circumstances, he was cautious in constructing and describing the relationship between the individual and society.

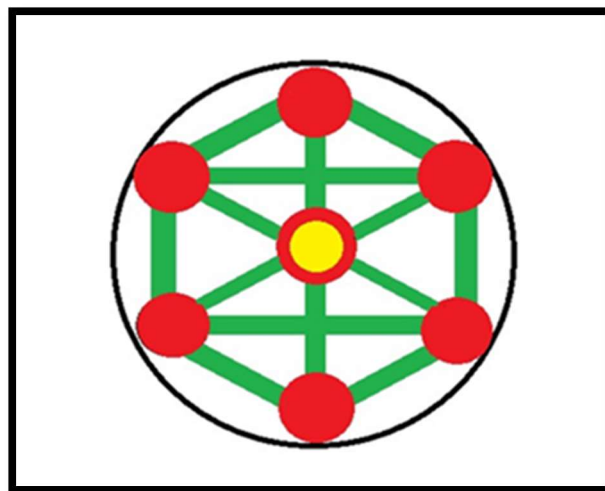


Figure 3: Explanation of the Vygotsky's Theory of Creativity: This diagram represents any society as a community (the black circle), with individuals (red spots), social interactions (the green lines), and actions and language (yellow spot). Vygotsky believed that art is an external action resulting from emotions (the yellow spot) which would be interpreted in society through common cultural understanding and interaction (the green lines).

His theory in education states that the learning process is “a reciprocal experience for the students and teacher” (Moll, 2013). He stressed that learning is two directional communications which align with progressive education. This is opposed to the traditional education method that relies on the information which educators teach to students. On the other hand, Vygotsky's Theory of Creativity emphasises the fact that creativity is an

activity stemming from the interaction of individuals, groups or organisations (Lindqvist 2003). This accentuates the social aspect of the influence of the individual on society and the influence of society on individual creativity.

Interestingly, he discussed the relationship between the two theories; the learning process and the imaginative creative ability that depend on constructivism theory (Lindqvist, 2003). As shown in Figure 3, he perceived any society was a community circle (the black circle). This community contains social interactions (the green lines) between its individuals (red spots). These social relationships in the community influence each person inside the circle. It constructs the inner world of each individual, such as their thoughts, values, and emotions. These implicit characteristics and values reflected on the explicit behaviours, actions and language of these individuals (which represented by the yellow spots in the diagram). Vygotsky believed that art is a form of these external actions based on the individuals' emotions (the yellow spot). It would be interpreted in society through common cultural understanding and interaction (the green lines).

Likewise, this common social and cultural understanding influences the personal characters of individuals as creativity, learning ability, and development. Thus, Vygotsky's theory emphasises the importance of considering the relationship between the psychology of individuals, the sociology of environment, and social relations to provide appropriate learning experiences for individuals. Gunilla Lindqvist wrote:

Human consciousness interprets art. Vygotsky maintained that no sociological theory can explain the origin of ideology because human consciousness is the origin of ideology. Consequently, an aesthetic theory of consciousness ought to be a psychological theory of consciousness, which gives consciousness a social dimension by interpreting art and culture. Humanity takes part in cultural methods and traditions that develop through history, but through individual artists and authors. Human's social dimension does not mean that we all have similar notions, but rather that certain notions unite us. Our notions are unique to both the individual and something that we share with others. (Lindqvist 2003: 246–7)

This suggests that there are common sensory experiences and concepts in cultures that enable new ideas, inventions or creation to be recognised, appreciated and valued.

3.4 Donald Schon: Reflective Practice

Donald Schon (1930-1997), was one of the most influential American philosophers of the twentieth century in the educational and social science domains. He taught at Massachusetts Institute of Technology (MIT) for the last thirty years of his life in the urban studies and education departments. The two main theories he developed were: Reflective Practitioners, and Organisational Learning.

Throughout his career, Schons' research focused on Dewey's theory of experimental learning and he was strongly supportive of the progressive educational approach (Schon, 1992). His journey of learning and teaching across different fields from music to urban design, resulted in a deep understanding of the learning process; experience which underpins his contributions. He furthered the understanding of Dewey's concept of learning by explaining the implicit reasoning of an individual learner. Interestingly, his theories have developed within the domain of design thinking research, and with an emphasis on interdisciplinarity. Schon encouraged designers to share their experience of creative practices in the learning environment to engage students' attention and elicit observations that would lead to a more effective learning process.

Schon's Reflective Practice theory emphasises the significance of the individual inner process in the learning system. Schons' theory suggested that deliberate attention given to the experience of learning is an essential psychological element of learning. He stressed that being involved in an experimental experience does not ensure learning in and of itself, but that focused attention is fundamental for conscious understanding. Schon believed that Dewey was "well aware, it is true, that our constructed problems determine what facts we select for attention, and that our ways of constructing problems from problematic situations are subject to variation from culture to culture, person to person, time to time, and context to context" (Schon, 1992, p.123). Everyone knows apples normally fall from the tree down to the ground, but Sir Isaac Newton asked why the apple fell down and not up. For Donald Schon, this would be an example of someone giving attention to the experience.

3.5 David Kolb's Theory: learning by experience

David Kolb is a modern educationalist who investigates and seeks to understand the learning process and learning style theories in order to improve the creative potential of students. He is one of the main researchers who investigate creativity in the educational domain and attempts to understand the educational process involved in creativity. At the beginning of the 1970s, Kolb developed the "Experiential Learning Model" that emphasised individual learning experience theory (Kolb, 1981). His model consists of four steps: first is **Experience**, when an individual has a concrete experience. The second step is **Reflection**, which is observing and reviewing this experience. The third step is **Conceptualising** where theorising about what has been experienced and the reasons behind it takes place. The fourth step is **Experimentation**, which involves testing and exploring options and alternatives, then planning what to do differently next time. Kolb has shown that individuals learn and acquire new knowledge and information through these four stages, and in this sequence.

Kolb (1984) developed a learning styles paradigm to complement this learning process model, because he realised that people have different preferences for how to learn. He developed four learning styles, with each style matching a personality type. The first learning style is **diverging**: this describes people who prefer working in groups and generating ideas, listening openly to personal feedback and observing situations from different point of views. They are emotional and feeling people who are characterised as sensitive, imaginative and usually artistic. The second style is **assimilating**: these individuals watch and think, usually preferring to attend lectures, read and analyse and take time to think. They are interested in abstract concepts and logical explanations, which make them suitable for science careers. The third style is **converging**: for those who are interested in doing and thinking, and who prefer technical projects which stimulate their thinking by working on practical tasks. Usually they specialise in technical careers and focus less on people. The fourth style is **accommodating**: which indicates people who are interested in feeling and doing. They usually follow their intuition rather

than logical analysis and they usually get information from others.

Kolb suggested that individual learning is linked to personality type, thinking style, background differences, and the teaching style of educators. He supported Jungian Theory of personal education and used the Myers Briggs Type Indicator (MBTI) approach to understand personality types in relation to education (Kolb, 1981, 1984). MBTI will be discussed later in the creativity chapter.

Another important study based on Kolb's learning process and learning styles theory was conducted by Honey and Mumford (1986). They indicated that there are four learning types, with most people having some characteristics from each. These types are **activists**, who learn by doing; **reflectors** who learn by observation; **theorists**, who think logically; and **pragmatists**, who test their ideas and learn from practising them. The significance of this study is that it developed learning styles based on Kolb's model and took learners' personalities into consideration. Honey and Mumford focused on Kolb's learning model and examined whether the different steps could form a foundation to learning types or individual personalities. Developing a typological model that fit learners to four categories has both advantages and disadvantages: it is a good approach in terms of considering individual differences in education. However, fixing all learners within four categories of learning style also narrows their intellectual abilities to learn flexibly.

3.6 Summary and conclusion

In this chapter, four theorists have been discussed from the education, psychology and sociology domains. The four theorists are; John Dewey, Lev Vygotsky, Donald Schon, and David Kolb. John Dewey is the father of progressive education, his theories and thoughts transformed the educational context and inspire educators still today (). His theory naturally aligned with the studio concept of practicing by doing because it supported learning by experiencing or doing. The other three theorists built their theories upon Dewey's thesis, taking it further, and in a new direction.

Vygotsky agreed with Dewey that the learning process is a social activity where students

interact with educators and peers. This interaction is the main form of knowledge exchange with potentials for inspiration in the learning process. Vygotsky took this notion further and linked it to creative potential, stating that creativity results from and within a familiar social context that will understand, make sense of, and appreciate that creative potential.

Schon agreed with Dewey's theory of learning by experience, but he took it to another level of consciousness. Schon emphasised the conscious attention that individuals should give through learning experiences in order to acquire knowledge. He explained that we do not necessarily learn the process behind activities we engage in until we focus on them and analyse them.

Kolb believed in the theory of learning by experience articulated by Dewey, but he went in yet a different direction with it. He deconstructed the learning experience creating phases or steps that construct a model of the learning process. From there, he developed a typology of learners differentiating the different learning styles depending on personal preference or embodied psychological reasons. Kolb's is the most applied theory in art and design education, as it supports the idea of learning by experience.

To sum up, these theorists are famous pioneers for their well-established theories that have been implemented in education and across different disciplines for decades. As stated, Dewey was the founder father of progressive education. Vygotsky, Schon, and Kolb developed Dewey's ideas in different directions. These theories paralleled other social movements and educational transitions, such as; urbanisation and progressive education, as discussed earlier, that emerged in the late nineteenth and early twentieth century.

Chapter 4: The Context of Interior Design Pedagogy

4.1 Introduction

As interior design is the core of this study, this chapter will give context to British Art and Design education. Section 4.2 will present a chronological summary of key historical events and movements that became milestones of interior design education in Britain. These events and movements have also had a significant influence in changing the educational domain of Art and Design within the UK. The studio paradigm is fundamental in all interior design programs and I will demonstrate its significance in sections 4.3, 4.4, and 4.5 by giving a brief description of the historical background of the studio, the project, and the critique, respectively, to understand the rationale and conceptual framework behind these pedagogical elements. This will give a strong basis and reference for further developments within the thesis. Then, related studies will be discussed briefly in relation to the main issues and aspects of the traditional design studio, highlighting existing theories in the body of knowledge of interior design, in relation to theories in the social sciences. Section 4.6 will contextualise Interior design pedagogy. This section is divided into three sub-sections to give a brief summary of the theoretical framework behind interior design pedagogy, current pedagogical practices, and the current situation of interior design programmes in the UK.

Overall, this chapter will focus primarily on studies in the field of interior design, **but** it will include some supportive studies from other creative domains. The aim of this focus on interior design studies, rather than borrowing from other disciplines, is to establish a theoretical and practical framework for interior design pedagogy. With a demand for an interior design pedagogy by practitioners and educators in the field, comes a need for thoughtful and independent (Clemons and Eckman, 2011) research within the discipline.

4.2: Brief History of Art and Design Education

Interior design education began in the 1960s. It built upon the disciplines of architecture and interior decorating in addition to other disciplines within the Art and Design domain. Thus, to give historical context to the development of interior design education, this

discussion will focus on art and design education in the modern age, since the mid-eighteenth century with the establishment of The Royal Academy of Arts, until the current day. During this time, dramatic social, political, and economical transitions happened to influence the Art and Design domain.

The start of formal modern Art and Design education in the UK began in 1768, when The Royal Academy of Arts in London was founded by King George III, “for the purpose of cultivating and improving the arts of painting, sculpture and architecture.” as stated in the Encyclopaedia Britannica (Chisholm and Hugh, 1911). The academy and the educational program adopted was inspired by the French *Académie Royale de Peinture et de Sculpture*, founded by Louis XIV in 1648 in Paris. The Decorative Arts was one of the core elements of arts education. Painters and sculptors were perceived as artists who could provide decorative elements for interiors. They were creating aesthetic elements that added aesthetic value to a space. So, artists and craftsmen were in high demand to decorate the palaces and prestigious buildings of the day (Tracy, 2007).

It is important to note here that the Royal Academy was an important platform where architectural education started to evolve, despite the fact that it was not the core of the educational stream. In 1830 a society was formed in London to tackle issues in the educational and practical domains of architecture. A few years later in 1837 this society developed to form the Royal Institution of British Architects (RIBA) which was the first professional and influential board of architecture in the UK, and internationally (Mace and Thorne, 1986).

King George III allocated forty places for artists within the Royal Academy and appointed the first thirty-four artists to those places. The first president of the Royal Academy was Joshua Reynolds. Visiting lecturers and academicians were chosen from different universities and arts schools in the UK and Europe to teach for nine months in the academy. Each educator came with a personal influence and direction which had an impact on the academy. In the first year, 77 students enrolled in the academy, and by 1830, it had attracted 1500 students. The programs began as a six-year course,

increasing to seven years, where it remained for ten years until 1920s. Most students did not complete their courses because of its length. The Educators and professors used the studio as the basis for education in the academy. A huge list of pioneering names in fine art, sculpture, painting, and music joined or graduated from the academy for more than two centuries (Tracy, 2007).

The Royal Academy of Arts had no specific curriculum or direct educational framework educators were given to follow. Each president chose the course for the school based on their own direction in art. This meant a change in direction for the school with each successive change of presidents. For example, George Barret Gave's influence was painting as the core of the curriculum, William Tyler's focus was on sculpture, landscape design, and architecture, while John Gwynn's centre of attention was on architecture. These disciplines were popular at the time because debating and enjoying fine art exhibitions were favourite pastimes for the elite classes, and showing one's status in the community was socially important (Chisholm and Hugh, 1911).

In the 1850s, the civil servant, designer, and educator Henry Cole oversaw the Design Reform movement, which was the next key development and establishment for art and design schools (Oshinsky, 2000; Miller, 2003). This period saw training in crafts become formalised and legitimised as an important economic resource for the nation. In 1836, the Committee on Art and Manufacturers published a report concerning the quality of British manufactured goods in comparison with those of Germany, France, Belgium and the United States (Malcolm, 2012). This report stated that manufactured products lacked quality in thoughtful design, and there was a drop in aesthetic appeal due to the gross overuse of ornamentation. Thus, the Government Schools of Design was founded in 1837 to improve the quality of British manufactured products, with Sir Henry Cole, artist, Richard Redgrave, and ornamentalist and theorist, Owen Johns as the main consultants to the program (Oshinsky, 2000; and Malcolm, 2012).

Richard Redgrave and Owen Johns were members in the Royal Academy whereas Henry Cole was not, he was a civil servant concerned with the education standard in the UK;

specifically art and design, higher education, and exhibitions and museums. The committee prioritised three principles to be taught in the Government School of Design. The first principle concentrated on the idea that decoration is secondary to form, the second principle stated that form is dictated by function and the materials used, and the third principle focused on the idea that design should derive from the historical English and non-Western ornament, including plant and animal-inspired motifs. The curriculum and teaching in the design school was centred on these principles of visual arts and design and the practical experience of manufacturing that students should acquire (Oshinsky, 2000; Miller, 2003; Malcolm, 2012).

However, in 1852 Cole published a report expressing the importance of amending the curriculum in the design school, suggesting students should learn about elements of drawing instead of principles of design. He noted that learning elements of drawing for all students was essential to promote aesthetic taste in decoration and colour harmony. His opinion was that understanding the principles of design was not enough to qualify students for placement in the industry. Although the Design Reform movement never achieved its proposed goals, it opened the way to several educational and industrial movements that followed. Some movements adopted the Design Reform principles, and some opposed those principles.

In the 1880s, the Arts and Crafts movement began in the UK as a rejection of industrialisation. The movement founded by the theorists John Ruskin and William Morris, emphasised the importance of returning to the spirit of English medieval time. This movement appreciated the handcrafted products of craftsmen. Their theories and concepts stressed the importance of moral principles of production by emphasising the emotions, taste, and happiness of the craftsmen. The Arts and Crafts movement stated that social cohesion was the most important concept in the manufacturing industry. Thus, they rejected the cruel dictates of machinery and business, and supported the freedom of craftsman to produce handcrafted products in the workshops (Malcolm, 2012).

In the twentieth century, in 1919, a school was established in Germany that would be a significant influence on art, design, and architecture in Britain and the rest of the world. The Bauhaus movement, founded by Walter Gropius a German architect, began as a design school in Weimar Germany. Six years later he moved the school to Dessau city. Walter Gropius, was a pioneering architect, among leading architects of the day, who led the way to modernist architecture worldwide. He constructed the famous Bauhaus building, which became an iconic figure of Modernism, representing modern architectural education and practice (Winton, 2000). Although this school and movement was established in Germany, it will be discussed in some detail in this thesis as it had a significant influence on art, design, and architecture in Britain, and worldwide. In addition to this, it has a direct relationship to the establishment of interior design as a discipline (Jared, 2000).

Gropius formed the Bauhaus by combining two different schools, the Weimar Academy of Art and the Weimar School of Arts and Crafts. He believed that art and design education should combine elements from both the fine arts movement and the design movement, so he developed a new craft-based curriculum (Miller, 2003). He also believed that designers and artists should adopt utopian concepts of producing beautiful and useful objects to fit the demands of modern everyday life. The key principle in training at the Bauhaus was the combination of a technical master and an artist within each workshop staff, bringing together technical skill and creative thought.

The Bauhaus combined multiple disciplines of painting, sculpture, architecture, and furniture and textile design. However, architecture played a key role and was the pinnacle of art and design training. As discussed earlier, the beginning of the twentieth-century modernisation, urbanisation, and industrialisation created a demand for more housing which increased interest in architectural training. The Bauhaus building itself was seen as the home of modern architecture and the other arts. It was revered as much as a medieval cathedral.

Later in 1923 Gropius stressed the importance of designing and producing for mass production and his motto was “Art into Industry.” This concept underpinned an increased production of homeware and furniture, which came to have a direct relation with interior design. Thus, the new Bauhaus building provided large studios for different practices. The cabinetmaking workshop was one of the most popular ones in the school. This popularity saw innovations to the fundamental notions of furniture design. These innovations evolved into a concept of dematerialisation in furniture production, which took conventional forms down to their minimum. This idea was dominating the practice in its aim for affordable mass production. Thus, the curriculum was directed to industry and manufacturing with specific considerations. When Hannes Meyer became the director of the Bauhaus in 1928, after Gropius, he kept the curriculum, but with less emphasis on luxury products and more consideration was given to public goods. This ethos was in support of the Modernist movement in most of the art and design schools in the United Kingdom in the mid-twentieth century, which encouraged the values of functionality and public prosperity.

Hannes Mayer did not survive long as director, because of the conflict raised from his moral ethos. Two years later he was replaced by the architect Ludwig Mies van der Rohe who stayed as director until the closure of the Bauhaus in 1933. Van der Rohe reconfigured the curriculum with an emphasis on architecture, in addition to the other departments. Drawing skills in 3D perspective of space and engineering were fundamental to the syllabus. The interesting fact here is the Interior Design department opened at this time, but for less than a year, under the direction of the furniture designer and decorator Lily Reich. However, because of political instability in Germany, the school closed and the hope for this new profession to see the light faded. Most of the educators in the Bauhaus immigrated to the USA during or after the war, where they continued teaching and spreading their modernist ideals (Malcolm, 2012).

After the Second World War, art and design education flourished again in the UK and the Basic Design movement became dominant in the domain. The Basic Design movement emerged in the 1950s, with notable Bauhaus influence. It started in Leeds College of Art

and the University of Newcastle-upon-Tyne. The main educators behind the movement were Harry Thubron, Tom Hudson, Richard Hamilton, Wendy and Victor Passmore (Owen, 2003). Thubron wanted to adopt Walter Gropius's concept of free open space for artists and designers from all disciplines to learn together and build an interdisciplinary pedagogy. In the 1960s this movement was nationally accepted and underpinned the Pre-Diploma one year foundation course, prior to specialisation on 2 year National Design Diploma NDD (later became National Diploma Art & Design and then 3 year Bachelor of Art) courses. It was normally divided into four disciplines – Fine Art, Graphic Arts, Fashion/Textiles, or 3D design. The 3D design discipline became the predecessor of Bachelor of Art B.A. (Hons) Interior Design courses. The pre-Diploma foundation course built upon a curriculum of 2D and 3D exercises, where students should successfully pass the course. Each educator had the freedom and flexibility to structure the curriculum within the institutional direction, even though there were some similarities between their educational strategies. For example, a syllabus plan written by Tom Hudson of the National Art Education Archive in Leicester College of Art, constituted five different types of drawing exercises distributed throughout the year. Spatial drawing, 3D perspectives of interior spaces, and landscape design were part of the drawing courses, which are still taught in interior design programs now.

In 1970, the National Advisory Council on Art Education published a report to emphasise the aims of the foundation course before an art and design degree. The report stated that the course was an opportunity for students and educators to determine individual student potential to be developed within the diploma or graduate programs. So, the foundation course became a preparation and realisation phase when students start understanding themselves and determine their preferences for a career future. Individuality in education was and remains a fundamental concept during this foundation phase, as it leads to an appreciation of individual differences and qualities. Foundation courses are of particular interest because they are a core concept in my research.

By the start of the twenty first century the foundation course shifted to be more focused on portfolio building, which prepares students to be ready and eligible for the next degree stage. This foundation is a characteristic of the systematic educational process that seeks standardisation and uniformity in the educational domain. It is a decisive change in direction from the fundamental pedagogical concepts of the Basic Design movement inspired by the Bauhaus. This standardised curriculum is still applied in most art and design educational courses today.

4.3: What is the studio?

Currently, “Studio” is the core element in all art and design disciplines (Micklethwaite, 2005). In interior design there is a particular approach to studio, which is different, say, from fine art, and it takes the greatest portion in any educational programme in the UK or internationally. Although the studio has attracted great attention from researchers across other disciplines to investigate it conceptually or practically (Blair, 2006; Orr, 2007; Abdullatif & Pooley, 2008), there is not enough research investigating the interior design studio (Guerin and Thompson 2004; Hill, 2007; Harwood and Dohr 2015).

Some researchers have conducted studies highlighting certain issues within the interior design domain. These researchers have emphasised a demand for maintaining or developing the studio according to the necessities of the time. For example, Dr Bernadette Blair stressed on the key factor of verbal dialogues in the design education, and the low volume of research investigated this factor. Moreover, there is a high demand from educational scholars to articulate the fundamental concepts underpinning the studio and reflect on it from time to time. Within the practice, there is a demand to clarify and distinguish the differences of the studio for each discipline, such as the language, values, pedagogical practices, and learning outcomes. An example of this is traditionally the studio has been perceived as a physical place that hosts a culture for a particular domain, which have common language, values, and pedagogical practices that aim for identifiable learning outcomes (Guerin and Thompson, 2004). Now, there is a new concept of virtual studios in art and design, and architecture education, which has consequently changed

the learning dynamic and assessment criteria (Earl, G.; Keay, S.; Beale, G.; 2008). The 'virtual world design studio' is a technological term for a graphical environment accessed on monitors or television screens. It is defined by Vosinakis and Koutsabasis as:

[T]he VW design studio is an engaging and constructive experience for students: In the VW environment, students and tutors held many online meetings, and students constructed several models about their design project, developed a digital prototype and conducted a remote usability evaluation. (Vosinakis and Koutsabasis, 2013, p. 59)

However, in interior design education the traditional studio is not fully investigated, and it may be too early to start investigating the virtual studio. Additionally, the traditional studio remains the cornerstone in current educational programs, therefore, my research focuses on the traditional studio only.

The traditional design studio is primarily a physical space where a group has a certain pedagogical dynamic. It is where the critique of work by educators is the main formative feedback students receive (Blair, B., 2007). Hill defines the studio as "an educational setting where students are physically located together in a common area utilizing manual or digital production methods" (Hill, 2007 p. 38). However, social interaction and the conventions of the critique are not part of his definition. Therefore, I will discuss the criticism process in the design studio literature from the social influence perspective, after giving a brief overview of the studio.

Historically, the beginning of studio-based education started in 1648 when Cardinal Mazarin built the *École des Beaux-Arts* in Paris, with an aim to gather talented people in drawing and painting under one roof (Clausen, 2010). His concept of the studio was a large space where all art students work in the art discipline they like best, resulting in a wide range of forms and huge potential for inspirations (Schon, 1985).

Later, King Louis XIV asked graduates from to decorate and furnish his palace at Versailles (Ministère de la Culture, 2015), which added to the value of the arts institution socially and educationally. The successful work of decorating and constructing Versailles and other buildings and palaces contributed to the revival and merging in 1816 of the

Royal Academy of Architecture that suppressed in 1793 to become a part of the Academy des Beaux Arts. They become the *École des Beaux-Arts* and the *École d'Architecture*. The latter specialised in Architecture and landscape design, (Clausen, 2010). There were distinguished features between creative arts studio and architecture studio, and the educational differences applied in each studio highlighted the different learning outcomes needed.

Socially, the studio is a place that hosts a culture where artists can; express their thoughts and emotions in any form of the creative arts, feel accepted and appreciated as a creative individual far from social norms and restrictions, and receive reflections and constructive feedback to develop their abilities from peers or educators (Poldma, 2003). In another words, the concept behind the studio is to provide a social space that encourages individuals to reveal their creative potential without fear or hesitation of being rejected, criticised or evaluated. It is meant to be a safe hub where creativity has free rein. From a pedagogical perspective, the design studio developed and continues to flourish as it supports teaching methods where modern pedagogical theories convert from traditional to progressive education (Deamer, 1999). "Learning by Doing," a theory discussed earlier in relation to John Dewey, Donald Schon, and David Kolb in section 3, is a key factor in the learning dynamic of the studio.

Practically, more recent attention has focused on the provision of the studio as a physical environment, social culture, and pedagogical dynamic. In fact, the most comprehensive discussion in this prospect can found in the architecture literature (Ormecioglu and Ucar, 2012; Kucko and Caldwell, 1994). It is justifying and proving that the physical environment of a design studio has a significant impact on the student and education practices in general. Thus, scholars started thinking and investigating other factors' influences.

Regarding the social cultural of the interior design studio, a significant study was conducted by Caroline C. Hill in 2007. "Climate in the Interior Design Studio: Implications for Design Education" focused on the relationship between the interior design studio environment and students' performance in relation to the instruction dynamic (Hill, 2007).

The study used an empirical approach, inviting 41 students from three levels (third, fourth and fifth year students) to respond to a questionnaire. The results of this study show wide agreement that the social environment of the classroom (or studio) has significant influence on students' performance. More precisely, students highlighted several vital factors in the studio environment, including; multi-cultural and ethnic differences, a wide variety of individual personalities, and gender differences, all of which require further examination for better understanding and utilisation of the studio environment (Hill, 2007). Hill concluded, when there was a lack of understanding which led educators and students to abandon the basic concept of the studio, the learning outcomes in these environments was negatively influenced (Hill, 2007).

In today's programs, students feel that they are under pressure from assessment by educators or social judgements by their peers (Smith, K.M., 2013). For some cultures or some personality types this continued sense of being assessed restricts their tendency to express themselves. Moreover, this kind of overly judgemental environment constrains the potential to express creative ideas, which is a critical hinderance for creativity (McCoy and Evans, 2002; Meneely and Portillo, 2005; Heinrich and Malkewitz, 2012).

Another aspect about the culture and interior design studio is the gender issue. In interior design studios students are often females, whereas in architecture and landscape studios males have the greater proportion (Pable, 2009; Konkell, 2014). Consequently, educators need to apply different learning styles sympathetic to gender differences in order to enhance the learning outcomes. For instance, when instructors increase the level of competitiveness in an architecture studio the expected outcomes may be different than they would be in an interior design studio, as males work better in a competitive environment, whereas females work better in a cooperative environment (Kohn, 1992).

This raises a research area worthy of further study: pedagogical dynamics in student and educator interactions in the interior design studio. Consideration of these various factors need to be tackled to further understand and develop the learning and pedagogical process within the interior design studio. My research focuses on students' personalities

as a variable that influences the pedagogical dynamic in the interior design studio. This investigation into educator and student interactions during their studio time and in design project critiques reveals significant elements that can improve the studio experience to maximise learning outcomes and student creativity. To support this call for further research in this area, Kohn states:

the studio classroom climate can be an effective tool for design educators as they seek to respond to changing student populations and to create educational settings that maximize student achievement.
(Kohn, 1992, p. 37)

Another supportive study conducted by Kucko and Caldwell (1994) investigated the design studio in fostering critical thinking. They stated that the experiential nature of the interior design studio is an encouraging environment for students to explore around the information required for a project. Thus, educators should give their students the freedom and confidence to widen their perspective and develop their research skills. Unfortunately, some educators only succeed in creating a “mystery-mastery” atmosphere in the studio.

Gabriel Goldschmidt has described this dynamic as a negative syndrome where “mystery in the teacher’s messages increase the student’s lack of self-confidence and awe of the teacher, but it certainly does not assist in learning through what is supposed to be an open instructional conversation” (Goldschmidt, 2009, p.300). This syndrome relies on educators coaching performance which negatively impacts on the learning outcomes by increasing the students’ lack of confidence (Schon, 1987). Therefore, some students state that the studio dynamic is stressful and confusing, as the critique process is frustrating and disconcerting. This atmosphere is considered to be a disappointing learning environment that leads to dissatisfaction and disengagement. However, this failure stresses the importance of positive personal and social interaction in the studio (Kucko and Caldwell, 1994; Hill, 2007).

4.4 The project in design pedagogy

Project-based learning is a methodology widely accepted in design, architecture, and engineering disciplines as a fundamental tool that gives students the experience of being in an actual design setting (Reid and Davies, 2000). “The exposition of students into a project environment forces them to assume roles close to their future profession; they can apply previously acquired knowledge and they also develop new knowledge from the project experience” (Flores et al., 2012, p.71).

According to Kolb (1984, p.3) “Project-based learning happens through problem solving, adaptation, and as heard in some studios, wrestling the problem to the ground.” Lynch et al. (2007) defined project-based learning as “learning that is goal oriented and project-based, challenging students through design and building projects to transform knowledge into action.” Both emphasise the flow between the thinking process and actions, and how they reflect on each other. Students showing different responses to the challenging design projects, which reflect their personal thinking styles. The studio is the environment that host all these actions and thoughts, which makes it rich environment for peer learning.

Moreover, the brief of design projects given in studio plays significant role as well in challenging and developing students’ skills and abilities. Engineering educators in the 5th International Conceive, Design, Implement and Operate (CDIO) Conference held in 2009 at the Singapore Polytechnic (Vigild *et al.*, 2009) outlined four different types of design projects, which stimulate creative thinking:

- The bucket-of-water project model, in which students use theoretical knowledge to design and implement a solution from a fixed starting point to a stated end goal.
- The minced-meat project model, in which students employ theoretical analysis skills to build from a stated starting point.
- The build-the-bridge project model, in which students apply their knowledge and skills toward the solution of a stated problem.
- And the make-it-fly project model, in which students apply their knowledge and skills toward the solution of a stated problem seeking a better quality solution to gain a

competitive edge (Vigild et al, 2009).

According to Susan Orr, Mantz Yorke, and Bernadette Blair (2014) the most important element in the project is the assignment brief, as it encourages students to respond in an individual and diverse way. These authors state “Within project-centred learning the role of the lecturer is to facilitate, listen and draw out. They create briefs that are discovery-based and experiential. This leads to responsive assessment rather than prescriptive assessment” (2014, p.39). The assignment brief is an experiential exploration of the studio curriculum, in such a way that makes students frame their own directive for learning. This loose framework of learning encourages divergent thinking in a safe place, which is the right environment to encourage creativity (Williamson, 2015).

In relation to interior design, a recent pedagogical study conducted by Margret Konkel (2014) investigated the build-to-learn project model as a teaching strategy in the interior design studio. Build-to-learn is a pedagogical approach that depends on the Experiential Learning of David Kolb’s theory (discussed in chapter 3). Konkel confirmed that the pedagogy of undergraduate interior design degrees is based on David Kolb’s experiential learning model, since the educational style in interior design studios uses a build-to-learn teaching strategy that focuses on developing ideas by doing and testing them practically. 40 educators participated in the research via an online survey that asked for their reflections and observations on the build-to-learn strategy.

The conclusion suggests that build-to-learn project strategy provides positive learning outcomes, as it helps students conceptualise their ideas by building models that also help them to investigate materials and construction methods. Also, it helps students to overcome the challenge of understanding and imagining the actual space visually, by faculties, and visualise the right Real-Scale prototype.

4.5 The critique or “crit” of design projects in the studio

The critique or “crit” session is the formative assessment strategy between educators and students in formal settings and arrangements in which the discussion and reflection on project designing processes takes place (Blair, 2006). The basic form of communication

in the studio is an informal discussion referred to as the “sitting with Nellie” strategy, which traditionally reflects the over-the-shoulder approach to educator intervention. Cal Swann published an important paper in 1986, named “Nellie is dead” where she discussed the issue of critiquing students’ projects in the studio. She highlighted in this paper the negative situation of critique in the studio that misses the old verbal tranquillity between students and tutors.

Following this publication, the crit in art and design studios as an educational strategy has been given academic attention by scholars in the UK. Bernadette Blair, Susan Orr, and Mantz Yorke have conducted several studies collaboratively and individually. In 2007 they conducted a study named *critiquing the crit* where they discussed the value of this educational method in the learning process. They highlighted several advantages of the crit that develops learning outcomes, but they also highlighted the main issues of the crit in the studio. “Time consuming” was at the top of these issues; with an increasing number of students, educators are challenged to give generous feedback to everyone. As a form of verbal communication, students sometimes experience being stressed because of difficulty in expressing their ideas during a crit, i.e. if speaking in another language, or being in front of their peers. Moreover, students could find it challenging to understand in-depth feedback and comments by educators, especially if the students are not familiar with design terminologies. From this study, Blair, Orr, and Yorke recommended several alternatives to be considered in the educational practice to avoid these issues. For example, they recommended submitting written feedback for students to reflect on her/his ideas quietly after studio time.

In 2012, Blair published *Elastic minds? Is the interdisciplinary/multidisciplinary curriculum equipping our students for the future: A case study*, a paper focusing on the crit, and how it can hinder the learning process if it is not carefully performed. She stated “The crit is viewed by students as an experience which ‘has to be gone through,’ but without many positive benefits being cited by the students except the opportunity to view the whole group’s work in one place, at the same time” (Blair, 2012, p.13). In this paper, she grappled with the issues and feelings, both positive and negative experiences that

students have through their crits. Moreover, she discussed personality type as a factor that underpins the different responses educators get from students. She stated “Creative individuals tend to be self-confident, independent, uninhibited and curious, willing to speculate and take risks.” (Blair, 2012, p.3). She concluded the paper with a list of learning benefits of good critiquing practice needed to develop the quality of creative designers who can reflect, learn, present, think, and criticise constructively in a positive environment. For example, students learn how to criticise the work not people, using constructive vocabulary not insulting comments. Students learn how to think differently from each other, and how to understand and respect opinions and tastes in design.

Another significant study in the architectural domain conducted by Goldschmidt *et al.*, (2009) investigated the verbal communication between teachers and students in the crit during studio time. The finding of this research highlighted the importance of the teacher’s performance in the crit in giving feedback to students, as it is the formal communication method for giving assessment and feedback. They emphasised the verbal ability of the teacher in considering personal differences, resulted in a constructive dialogue with their students. They gave clear characteristics of this positive teacher example, such as; the ability to listen carefully, understand students’ intention, an aptitude to encourage students to talk, the capacity to reflect theoretically and practically on what students said, and the ability to be clearly understood among students. The study stressed the high potential to involve students’ personality type in maximising the quality of this verbal dialogue.

One of the key studies for my research is Hilal Tugba Ormecioglu and Aydin Ucar’s (2012) *First Design Studio Experience in Education of Interior Architecture: an Example of Akdeniz University*. Because it investigated the quality of the interior design studio by testing graduate students’ creativity levels. This research conducted under the Bologna studies agreement in 2000 to develop Higher Education in Europe. The University of Bologna has the privilege to be leading such a study, as it is one of the oldest university in Europe, and the oldest in Italy established 1088. Interestingly, the first art academy

funded by the Carracci family under the University of Bologna called Accademia degli Incamminati in 1582. This school has a leading role in the art movement in the Renaissance time, as it is the first institution established life drawing as key discipline for aspiring artists (Robertson, 2008).

After modifying the curriculum in Interior Architecture Department, in Akdeniz University in Turkey, this study compared the old teaching strategy (deductive approach) with the modified teaching strategy (inductive approach) in relation to the creativity level. The methodology was to survey interior designers, manufacturer and craftsmen in addition to past and current students. So, two surveys conducted in two phases; one in the old strategy time, second when the new strategy applied, then the results were compared.

The first survey results shows that 50% to 75% of the practitioners indicated that students have low creative scores. They justified this issue by pointing to the studio curriculum as the main reason for deactivating students' creativity. Whereas, the comparison of the outcomes from the new studio curriculum with those of the old one shows significantly positive results. They stated that first-year students should be introduced to more conceptual ideas like a "person in a space", which would help them understand the fundamentals of projects in a practical way (Ormecioglu and Ucar, 2012).

By analysing these results, the main finding shows that the old curriculum was dense in order to armour the students in a structured way with as much skills and knowledge as possible, leaving little space for inspiration and thinking which led to frustration. With the new curriculum, students have more freedom and time to search for information and they felt more independent and confident in thinking creatively in studio time. There are more findings related to the methodology will be discussed in the methodological chapter.

4.6 The Pedagogical Context of Interior Design

4.6.1 The theoretical framework of interior design pedagogy:

In the last twenty years, there has been growing academic attention to interior design theories following the development of the educational area. Professor Stephanie A. Clemons and Professor Molly J. Eckman published a key paper in 2011 entitled,

“Exploring Theories Identified in the Journal of Interior Design,” that identifies and summarises the main theories of interior design practice from 1975 to 2008. Clemons and Eckman summarised the social theories that have been applied in the field of interior design in a table of three columns, as seen in the appendices table (1).

In the first column are listed the category and subcategory of the social theories that have been chosen for the study. The second column defines the sample theory, in its original form, from the specific social science discipline, with references to the theorists’ names. The third column discusses the application of these social theories within the interior design discipline, and illustrates the applicable strategies reliant on these theories. Most of these refer to practice, but one in particular focuses on how interior designers are educated, which references Kolb’s Experiential Learning style theory within the domain of education and pedagogy.

The practical theories in Clemon’s and Eckman’s table are: Arousal theory, in the study of human behaviour; Post-modern theory and criticism; Diffusion of Innovation Theory as applied to colour, lighting and creativity; Norberg-Schulz sense of place theory pertaining to the physical environment; E. McClung Fleming Model to study Material Culture Artefacts within the domain of history; Porras and Robertson Model Field of Organizational Development, as relevant to professional practice; and finally The Atchley’s Continuity Theory, with regard to specialty design. Clemons and Eckman encourage scholars and academia’s to build new theories in the field, and they suggest grounded theory as the method to best support the building of new theories, as will be discussed in the methodology chapter.

For my research context, I will analysing their discussion of Kolb’s Experimental Learning Theory, which describes learning as “the holistic engagement of effective, perceptual, cognitive, and behavioural process” (Kolb, 1984). In Kolb’s Theory, there are four different learning styles: diverger, assimilator, converger, and accommodator (as discussed in chapter 3, section 5 of this thesis). These learning styles present the various ways in which information is grasped and processed by individuals. Clemons and Eckman

state that it is essential for those in the interior design profession to learn and be able to transform concepts successfully. They emphasise that understanding the learning styles most common to members of the interior design field, can be efficacious in determining how best to match those styles of learning with the concepts that need to be taught (Kolb, 1984).

4.6.2 Interior Design pedagogy:

Recently, there has been an increase in attention towards the field of interior design education due to the growing industry and business. Conversely, this educational development has enhanced professional standards since 2012 as stated by the International Business and Information System world (IBIS world, 2016). As a result, the number of students studying interior design at both diploma and bachelor level has increased, which has led to an increase in the number of interior design educational programmes across the globe (Harwood, 2013).

There have been a number of studies considering different areas of interior design pedagogy, for instance: developing programme descriptions (Ballast, 2010); pedagogical theories of interior design (Vaughan et al., 2008; Konkel, 2014); curricula and courses (Harwood, 2013); what skills should be acquired by students (Carmel-Gilfilen and Portillo, 2010; McLain-Kark and Rawls 1988); the physical environment of the studio (McCoy and Evans, 2002); and assessment criteria for projects (Smith, 2013; Orr, 2007). However, despite this rapid development, the body of knowledge of interior design education, both theoretical and practical, is still considered to be an evolving area and in need of further attention (Carmel-Gilfilen and Portillo, 2010).

One significant study on interior design pedagogy is *Interior Design Education in the 21st Century*, conducted by Denise Guerin and Asher Thompson (2004). They state that the progress in the profession of interior design over the last thirty years is highly regarded. However, they highlighted three main issues that should be tackled through future research. The first issue is the depth and breadth of knowledge, or the data base in the field; second, is the need for evidence-based design strategies in research and practice;

and third, is the low value of academic and postgraduate research in the domain. Guerin and Thompson (2004) believe that further attention from both interior design educators and practitioners is important to tackle future research and development. In particular, is the need to address the ambiguity that underpins the practical strategies, either in the academic or the professional domains.

However, the authors did not identify how these issues relate to creativity since they did not state a need to improve creativity in interior design education. Nevertheless, they adopted a key study in architecture education, *Building community: a new future for architecture education and practice: a special report*, conducted by Boyer and Mitgang (1996). Interestingly, this study provides a comprehensive qualitative assessment of the field of architecture, and the seven recommendations from this study form significant connections to the challenges facing interior design education. As stated above, there is an overlap between interior design and architecture, with some principles and values underpinning both fields. Thus, from Boyer and Mitgang's (1996) report, we can borrow two points to solve the issues of the depth and breadth of knowledge, and evidence-based design. These two recommendations are "an enriched mission" and "a climate for learning".

Regarding the breadth and depth of the interior design data base, Boyer and Mitgang (1996) emphasised that it should be enriched in areas that focus on contentment, wellbeing and productivity. Thus, there is a demand for a greater understanding within the context of human behaviour and attitudes in relation to interior spaces. A good example of research for such a prospect is an unpublished study conducted by David Wang (1995). His study concluded that designers should focus more on the life experience of the client and less on designing beautiful products. In other words, future research in interior design subjects should focus on evidence-based research values directly related to users' or clients' welfare, health, and satisfaction.

On the issue of evidence-based design, Boyer and Mitgang (1996) claim that designers rely on their previous knowledge and experiences when they suggest a design solution.

This design approach seems logical and it could solve problems and meet the requirements for clients or projects. However, they stated that designers should be encouraged to push themselves and the field for further development. Furthermore, they explained that a design-based approach does not challenge the designer to create original design solutions, as they would use any applicable solution from their previous experiences. Currently, there is a greater emphasis on encouraging designers to make decisions based on practical evidence and research to produce creative designs that satisfy clients and develop the domain (Orth, U., Heinrich, F. and Malkewitz, K., 2012). They suggested that some designers if they slow down the process of decision making and be given a chance to imagine and follow personal intuition, it would help them to create a thoughtful design. Guerin and Thompson (2004), therefore, emphasise the need for further empirical research in the field, to investigate a set of values to guide the theory and practices of interior design that testified strategies used in the studio.

The last point that Boyer and Mitgang (1996) make is that the enriched mission for the value of research is relevant not just for educators and researchers, but for practitioners too. Their article argues that the investigation has become a requirement for professionals because the world is rapidly developing and getting ever more complex and specialised. Thus, it would be rational for designers to carry out research on a project before they start designing. Currently, in interior design education, students learn the latest methods to critically research the relevant data base. At an academic level, Boyer and Mitgang stress the significance of encouraging interior design graduates to continue their postgraduate education, as it is an essential step to improve the standards of thoughtfulness and professionalism in both education and practice.

4.6.2 Recent Interior Design Programs in the UK:

Interior design education was formally embraced in British higher education in the 1960s and since that time it has seen a rapid spread and development (Harwood, 2010). Studying interior design in the UK is available at the apprenticeship, diploma, undergraduate, and postgraduate levels.

The government started the apprenticeship in interior design which allows sixteen-year-old individuals and above to learn skills and trades from professional sectors, then get a fixed job and salary for a certain period of time (gov.uk). The National Design Academy provides three diplomas in interior design as Foundation in Design and Art (FdA), they are; Interior Design, Retail Interior Design, and Heritage Interior Design (NDA). The foundation courses provide a flexible and essential transition certificate to give students important skills and knowledge for two years. The student can take a further one or two years to get a bachelor degree in art (BA). If a student cannot complete the BA, they will receive a diploma degree and start their career. However, according to The Universities and Colleges Admissions Service website (UCAS), the National Design Academy website, the Studyin-UK.com report, and the IBIS world report interior design is becoming very popular among undergraduate students in the UK.

In the UK, the current Interior Design programs available in Higher Education Institutions can be found on the UCAS website. It provides a wide range of 239 interior design or related programmes ranging from full-time/part-time, undergraduate/postgraduate, bachelor/diploma, on-site/ distance learning. There are specialised disciplines included amongst interior design programmes, such as, Interior Architecture, Textiles for Interiors, Crafts and Products for interiors, Spatial and 3D design, Architecture and Technological design, Interior Environmental design, and Furniture and Interior Decoration.

4.7 Summary

This chapter has discussed five main subjects: the history of the Basic Design movement in the nineteenth century; the culture of the studio as an educational paradigm in art and design education; the pedagogical context of interior design and how it has emerged and developed in the last four decades; a demonstration of the existing body of theories in the interior design discipline which have been collected recently in one text; and finally, the established interior design educational programs in the UK.

The chapter explained the beginning of art and design education in the studio, then it developed to be branches in the domain. After that, the studio witnessed the modern

influence that led to the Basic Design movement of studio in the nineteenth century. This movement has shifted the Art and Design education from traditional to professional and standardised system. Soon later interior design established as a separate domain and became a popular profession in the 1960s. Following this the domain started building the academic strategies and theories that underpinning the domain.

Chapter 5: Creativity

5.1 Introduction

Currently, the literature on the subject of creativity is widespread and diverse. It extends into many different disciplines such as; art and design and engineering, but it is primarily found in psychology and these specialised areas within the discipline: *behavioural* (Amabile and Pillemer, 2012), *clinical* (Gardner, 2011; Sternberg, 1999), *cognitive* (Chermahini and Hommel, 2012), *developmental* (DeBono, 1985), *educational* (Guilford, 1958; Craft, Jeffrey, and Leibling, 2001; Jackson, 2006; Thorne, 2007; Gustina and Sweet, 2014), *evolutionary* (Csikszentmihalyi, 1997), *personality* (Barron and Harrington, 1981; MacKinnon, 1966; Kise, 2014; Hodgson 2012), *organisational* (DeBono, 1985; Maslow, 1943), *sociocultural* (Amabile and Pillemer, 2012; McClelland, 1987; Runco, 2014), *economic* (Weisberg, 2006; Runco, 2014), and *historical* (Amabile, 1996b; Craft, Gardner, and Claxton, 2008). Therefore, the discussion of creativity within psychology will figure throughout this chapter. Historically, the definition of creativity has been significantly influenced by religions and cultures (Sternberg, 1999; Craft, 2008; Runco, 2014). Anna Craft, Howard Gardner and Guy Claxton (2008) published a book titled *Creativity, Wisdom, and Trusteeship: Exploring the Role of Education*. Anna Craft in her part in the book showed us the fascinating and rich variety of meanings creativity can hold, she discussed the ancient civilisations who perceived creativity in terms of “divine inspiration.”

In order to get a better grasp on what creativity is, it is necessary to consider its numerous definitions and to examine different kinds of creativity. Therefore, there are two sections that provides necessary information from two perspectives; the lexicography and typology of creativity for a better understanding of the subject. This understanding is essential for discussions that come later in the thesis. Because my research utilises a Grounded Theory approach, the review of creativity will take its direction from these two perspectives and the chapter will be divided into two sections. The first, sections 5.2 through 5.4, will consider the concept of creativity through an examination of the Oxford Dictionary definitions of creativity, along with the definitions used in the educational domain from the

The Rhetoric of Creativity report. This report, conducted by Banaji et al. in 2010, is considered a great achievement for collecting all possible meanings and interpretations of the word 'creativity' for use in the educational domain. The rationale for choosing this report is to make use of this achievement to better understand how creativity is categorised for use within education. This will provide a basis for the theoretical framework that underpins my contribution. However, the practical implications of this report are not within my purview because of its focus on school-level education.

The second section, 5.5, is a critical discussion that analyses the typology of creativity that raised from the collected data in relation to the existed typology theory in the literature. In other words, this discussion supposed to be in the analysis section. As it wave the data based on the literature review theme and theory of 4Ps, and margined them with the new data and findings arise from this research. I will discuss the types of creativity and give a contextual overview of the relevant literature here. Section 5.5 is sub-divided into four segments: 'the creative person,' 'the process of creative thinking,' 'the creative product,' and 'the creative press.' These segments, based on the 4Ps Theory by James Melvin Rhodes, provide a strong contextual structure for examining the different types of creativity, because it provided holistic applicable typology that covered all types of creativity so far. I'll discuss Rhodes' theory further in section 5.5. under the main four typologies; person, process, products, and press from students prespectives in the domain of interior design.

Therefore, discussing creativity within a specific domain is necessary to recognise, evaluate and appreciate the creative idea, product, or person. "No culture can assimilate all the novelty people produce without dissolving into chaos" (Csikszentmihalyi, 1997, p. 2). In this quote Csikszentmihalyi suggestes that each domain should has a set of values, criteria, or disciplines to appreciate creativity. For example, a creative poem will be appreciated and understood in the creative writing domain, but it might not even be recognised in the engineering department. From this notion, my research aims to understand the meanings of creativity within the interior design domain in order to achieve

it, assess it, and aim for it, with clearer vision.

Grounded Theory, which is an inductive approach, directs the collection of data through navigation of the literature. Conclusions are then drawn through an analysis of the collected data. As I gathered and analysed data, I encountered further theories of creativity that were helpful in my attempts to interpret the findings. However, for fluency and coherence for the reader, I have positioned this section on creativity within the main body of literature for the research. Therefore, as mentioned, this section on creativity provides the knowledge that readers will need to understand the following chapters.

5.2: Linguistic Definitions of ‘Create’ ‘Creative’ and ‘Creativity’

The Oxford English Dictionary defines ‘creativity’ as:

Creative power or faculty; ability to create. The creativity whereby the actual world has its character of temporal passage to novelty. (Oxford University Press, 1989: 1135)

To ‘create’ has five definitions in the OED:

- (1) A. Said of the divine agent: to bring into being, cause to exist; especially to produce when nothing was before, ‘to form out of nothing’ B. with complemental extension.
- (2) A. To make, form, constitute or bring into legal existence (an institution, condition, action, mental product or for, not existing before). C. of an actor: To be the first to represent (a part or role) and so to give it its character. D. to design (a custom): see creation also, to design and execute a scheme of interior decoration.
- (3) To constitute (a person of rank or dignity); to invest with rank, title, etc. To create a peer, to create a man as a peer.
- (4) To cause, occasion, produce, give rise to (a condition or set of circumstances).
- (5) To make a fuss, grumble, ‘go on’ about (something). Slang.

‘Created’ is defined as “Brought into being by an agent or cause. A. made or formed by the divine power. B. constituted of a certain dignity or rank.” (1134).

'Creative' has two definitions:

- (1) A. Having the quality of rating given to creating; of or pertaining to creation; originaive. B. of literature and art, thus also of a writer or artist: inventive, imaginative; exhibiting imagination as well as intellect and thus differentiated from the professional mechanical, etc., in literary or artistic production. So creative writing, such writing; also frequently in the U.S. as a course of study. C. creative evolution. D. extended uses. E. Applied to financial or other strategies which are imaginative or ingenious-
- (2) Affording the cause or occasion of productive. (1135)

These definitions show the variety of possible interpretations of the term, depending on the general or the specific domain, and its lexicographical function within a sentence or phrase. Additionally, the OED definitions use different terms to describe the same process; namely by thinking, acting, or doing something that leads to a new objective. The assumption here is that it must have an objective to be considered creativity.

Coincidentally, the second definition of the word 'create' above uses the design of an interior decoration scheme as an example. This emphasises the wide range of interpretations and meanings of the term. This example also serves to highlight the significant link between the concept of creation and interior decoration, which is the root of the interior design profession.

The semantic definition of creativity, has gone through different paradigmatic phases and visions. Historically, creativity has been significantly influenced by religions and cultures (Sternberg, 1999; Craft, 2008; Runco, 2014). The ancient Egyptian, Greek, Jewish, Christian and Islamic traditions that conceived of creativity in terms of "divine inspiration" (Craft, 2008) continued until the eighteenth century, when the general perception of creativity came to be understood as a natural human ability fundamental to the notion of 'genius'. Thus, creative individuals throughout history have simply been appreciated and recognised as exceptionally gifted (Amabile, 1983).

In the nineteenth century attention was given to creativity, when Francis Galton studied individual differences of human abilities. He wrote the first genuine classic in the history of creativity research: *Hereditary Genius: An Inquiry into Its Laws and Consequences* (Galton, 1869). This research included; scientists, artists, musicians and others and concluded that individuals born with creative talents and abilities not nurtured.

The mid-twentieth century saw a great number of scholars attempting to define and study creativity across all disciplines, especially in the quickly expanding field of psychology. It was a flourishing time for creativity and psychological research, and the philosopher Joy Paul Guilford was central to this development. He was one of the first researchers to study creativity, with considerable uncertainty and great ambition. He was a key modern figure known for his attentive research on creativity as a psychological attribute (Weisberg, 2006). Guilford defined creativity as follows:

“In its narrow sense, creativity refers to the abilities that are most characteristic of creative people. Creative abilities determine whether the individual has the power to exhibit creative behaviour to a noteworthy degree. Whether or not the individual who has the requisite abilities will actually produce results of a creative nature will depend upon his motivational and temperamental traits. To the psychologist, the problem is as broad as the qualities that contribute significantly to creative productivity. In other words, the psychologist’s problem is that of creative personality.” (Guilford, 1950, p. 444)

This definition reveals that Guilford was uncertain about which direction would be the best route to explain creativity. He does not clarify what he means by “creative abilities”, “creative nature” or “creative personality”. It may be skills, talent, gift, or personal characteristics which impelled Guilford to investigate it further within the educational domain.

One of the most widespread, recent definitions of creativity comes from Robert Sternberg (1999; 2006), which outlines creativity as the process of bringing something novel and useful into being. He used psychometric and clinical approaches on the mental and actual process that leads to creative outcomes.

5.3: Defining Creativity in the Educational Context

The Creativity, Culture and Education Organisation is an international organisation aiming to foster the creativity of children and young people, inside and outside of education.

Banaji, Burn and Buckingham, from the research team responsible for *The Rhetoric of Creativity* report, emphasise the importance of creative learning and fostering creativity in all sectors. They state that:

“Fostering creativity is fundamentally important because creativity brings with it the ability to question, make connections, innovate, problem solve, communicate, collaborate and to reflect critically. These are all skills demanded by contemporary employers and will be vital for young people to play their part in a rapidly changing world.” (Banaji et al., 2010, p. 4)

This statement makes it clear that creativity has developed into a wide term that spans and is applicable across subject areas. The authors also state that all educational and organisational bodies could be involved in creativity:

“Academics, policy-makers and arts educators deploy a range of claims about creativity which emerge from different theories of learning, different contexts (artistic, bureaucratic, pedagogic, political), different artistic traditions (fine arts, popular arts, different art forms, commercial art), different academic or quasi-academic traditions (liberal-humanist literary theory, aesthetics, philosophy, psychology, communication and media studies, cultural studies) and different policy contexts (social inclusion, vocational education, gifted and talented).” (Banaji et al., 2010, p. 11)

This report articulated nine uses of the term creativity: ‘creative genius,’ ‘democratic and political creativity,’ ‘ubiquitous creativity,’ ‘creativity as a social good,’ ‘creativity as economic imperative,’ ‘play and creativity,’ ‘creativity and cognition,’ ‘the creative affordances of technology,’ and ‘the creative classroom’ (Banaji, et al, 2010). These terms have been constructed in order to determine the use of the term creativity and to increase the accuracy of understanding its meaning. In what follows, the definition of each will be stated.

‘Creative genius’ is a special quality of a few individuals who are either highly educated and disciplined or inspired in some way, or both. A book published by Kant in 1790 named *Critique of Judgment*, presents genius as the “mental aptitude” necessary for the production of fine art; a capacity characterised by originality as opposed to imitation.

'Democratic and political creativity' are meanings derived from and by popular cultural products. Creativity is thus perceived as inherent in the everyday cultural and symbolic practices of all humans (Banaji, *et al*, 2010).

'Ubiquitous creativity' describes creativity as not just about the consumption and production of artistic products, whether popular or elite, but involving flexibility in response to problems and changes in the modern world and one's personal life.

'Creativity as a social good,' which sees individual creativity as linked to social structures, is characterised by an emphasis on the importance of educational policy for the arts as tools of personal empowerment and ultimately, for social regeneration.

'Creativity as economic imperative' describes the future of a competitive national economy viewed as dependent on the knowledge, flexibility, personal responsibility and problem-solving skills of workers and their managers. These are, fostered and encouraged by creative methods in business, education and industry. There is a particular focus here on the contribution of the 'creative industries'. This point-of-view annexes the concept of creativity in service of a neo-liberal economic programme and discourse.

'Play and creativity' relies on the notion that childhood play is the foundation of adult problem solving and creative thought. This concept has produced important parallels between contemporary arguments for the role of creativity and the role of play in education.

'Creativity and cognition emphasises, at one extreme, the internal production of creativity by the mind, and at the other extreme, on external contexts and cultures. Its trajectory in education is derived from both the Piagetian tradition, and the more culturally situated notions of creative learning as expounded by Vygotsky, Dewey and Bruner.

The 'creative affordances of technology' represents the perception that creativity is a significant motive for the use of digital media in education. Avril Loveless (2002) states that digital technology has encouraged previously unseen ways of expressing and developing creativity. Technology provides new methods of mental interactions considered to be advanced, with the development of complex abilities, as compared with

our analogue past.

Finally, the last term discussed in this report is 'the creative classroom' that places creativity at the heart of education. This concept focuses on links between spirituality, knowledge, skills, creativity, teaching and learning and the place of creativity in a progressively controlled curriculum.

The conclusion of the rhetoric report offers practical advice to educationalists. It locates itself in pragmatic accounts of "the craft of the classroom", rather than in academic theories of mind or culture (Banaji, Burn and Buckingham, 2010).

5.4: A Theoretical Discussion Underpinning the Study of Creativity

The subject of creativity attracted considerable attention in the mid-twentieth century. There are several educational theories and practices about investigating creativity and fostering creativity in students. As Runco puts it, "education can influence the creativity of students in various ways" (Runco 2014: 203).

The German philosopher, Immanuel Kant, made a notable contribution to the literature of creativity. However, his concept is slightly contradictory to the historical notion of creative genius. He stated that all humans are born with natural creative and imaginative abilities and through their life stages they either lose it or keep it (Cannatella, 2004). Kant stressed that creativity is limited to artists who are able to develop their creativity (Rothenberg and Hausman, 1976) and he emphasised the importance of raising people in beautiful environments that feed their natural abilities (Höffe, 1994). This theory highly values artistic creativity, but is somewhat neglectful of other types of creative potential and innovation; such as functional creativity and innovation.

Another point of view is that of Sigmund Freud, the pioneering psychoanalyst, who stated that creative potential is strongly connected to time, experience, emotion and motivation. Freud believed that the principles of pleasure, that is to say, striving towards pleasure and satisfaction while avoiding pain and unpleasant feelings, were also the psychological motivation for human creativity (Freud, 1957). Freud, being interested in dreams, creative writing, and the investigative process of psychoanalysis, attempted to explain and

describe creativity (Freud, 2001). Through his investigations he emphasised that creativity is not a personal quality, but rather the result of circumstances.

The German philosopher, Hannah Arendt, in her book, *The Human Condition* (2013) discusses creativity in comparison to the idea of genius. She suggests that the conventional idea of creativity is that of the 'creative genius,' which has been with us since the Renaissance until the end of the nineteenth century. In relation to this, she mentions the emerging labour movement that protests the concept of creative genius, claiming that "productivity or creativity is no ideal and [...] lacks all experiences from which the very notion of greatness can spring" (Arendt, 2013, p. 210). Which is opposition to the Romanticism definition of genius which is "a person driven by a force beyond his or her control and as an ability that surpasses the natural and exceeds the human mind makes it virtually identical with the classical notion of divine madness or frenzy" (Guyer, 2003).

From a feminist point-of-view, there are gender issues inherent in the notion of creative genius from the Renaissance onwards. Christine Battersby (1989) discussed this issue in her book *Gender and Genius: Towards a Feminist Aesthetics*. The essence of her discussion was that a genius was a person with divine quality who had special abilities of vivid imagination, high sensitivity, and aesthetic values. However, Battersby pointed out the problem was admiring these qualities in males, and not giving credit for it in females. This prejudice toward creative females nullified their creative potential (Battersby, 1989).

In 1990 Susan Mendus published a book review that analyse Battersbys' book. She discussed the nineteenth century when society and academic community started acknowledging female visible characteristics for creative genius, though still there were no equality between female and male geniuses. According to Mendus "Romantics' revolution of feminine values did not result in female equality but rather in the presentation of creativity as a bonded to male sexual energy..." (1990, p. 525 – 526).

Finally, the twentieth-century philosopher Alfred Whitehead was interested in metaphysics and from this position he, too, investigated the field of creativity. In his iconic book *Process and Reality* (Whitehead, 2010, he states that "creativity is the principle of novelty"

(p. 21). This indicates a broad view of creativity as the production of novel work. He also defined creativity as “a substantial activity which is individualised into a multiplicity of “modes” each of which corresponds to a single actual entity” (Whitehead, 2010, p. 361). This definition has a higher degree of complexity, as it emphasises the influence of society and personal factors on creativity beside the hosting culture. Therefore, the following section attempted to simplify and deconstruct the understanding and definition of creativity as: person, process, product, press or place, using 4Ps Theory by James Melvin Rhodes (1961).

5.5: The Typology of Creativity

Introduction:

What are the different types of creativity? What are the criteria that turn creativity into a ‘type’? How can we differentiate between the various types of creativity? According to Kaufman and Beghetto (2009), these questions remain insufficiently articulated, despite a recent surge of publication in the field. This section discussed several theories that attempted to typologise creativity for simplification purposes. The main theories discussed: ‘4Ps theory’ formulated by James Melvin Rhodes (1961), Multiple Intelligence by Howard Gardner (1993), and Four C model by Kaufman and Beghetto (2009).

Each of these theories sported the notion of typologising creativity. The Four C model responded well to the different types of creativity in terms of the level of creative outcomes. The Multiple Intelligence categorised peoples’ creative abilities and talents depending on their natural potentials. Whereas the 4Ps has a more broad typology of including the four ‘separate strands’: Person, Process, Press and Product. In *An Analysis of Creativity* (1961) Rhodes explains what defines each strain:

1. “The term person, as used here, covers information about personality, intellect, temperament, physique, traits, habits, attitudes, self-concept, value systems, defense mechanisms and behaviour.” (p. 307)
2. “The term process applies to motivation, perception, learning, thinking and communication.” (p. 308)

3. "The term press refers to the relationship between human beings and their environment." (p. 308) Both this notion and the word 'press' are rather common in the field of education.
4. "The word idea refers to a thought which has been communicated to other people in the form of words, paint, clay, metal, stone, fabric or other material. When an idea becomes embodied into tangible form it is called a product." (p. 309)

The 4Ps theory has been chosen and adopted as it fits all types of creativity raised from the data of this research as stated in the beginning of the chapter. As it provide a wide umbrella that can host all types and categorise them well, for easy tackling defining and discussing.

The Four C model strategy attempts to deconstruct the term 'creativity' as type of categorising the types of creativity and standardised creative outcomes. Educational psychologists, Professor James C. Kaufman and Doctor Ronald Beghetto, whose specialised subject is the taxonomy of creativity, developed the model to categorise creativity. In their article *Beyond Big and Little: The Four C Model of Creativity*, Kaufman and Beghetto (2009), discuss the two established research directions of creativity studies; gifted and heveloped creativity. The Four C model has been developed to provide a guide to distinguish the levels and magnitudes of creativity and to help researchers to situate their studies in the domain of researching creativity. As shown in figure 12 their first category, the 'Big C' direction, investigates the creativity of maverick individuals, while the 'Little C' direction concerns our common and everyday creative potential. Kaufman and Beghetto raise the issue of neglecting other types of creativity, which compelled them to include two more pathways. 'Mini C' focuses on the "creativity inherent in the learning process" (Kaufman and Beghetto, 2009, p. 3), while the 'Pro C' path focuses on experienced professionals who bring something to their field or profession. The 'Mini C' differentiates people who have developed a creative skill or knowledge in everyday life, from the 'Little C' individuals who have the same skill naturally. The 'Pro C' differentiates professional individuals, who lead dramatic change in their fields as a result of long

experience, from 'Big C' maverick individuals.



Figure 4: a diagram presenting the 4Cs model of creativity constructed by Kaufman and Beghetto (2009).

Another dimension of personal creativity is **intelligence**. Psychologists have found that a high Intelligent Quotient IQ alone does not guarantee creativity; however, a certain level of intelligence is necessary. The discussion above demonstrates that personality traits are a significant aspect of creative potential. People with personality traits such as nonconformity, curiosity, willingness to take risks, and persistence often display divergent thinking (Wade and Tavris, 2008).

A notable researcher who studied the relation between personal intelligence and creativity is Howard Gardner (1993; 1996, 2011). His theory of 'multiple intelligences' resulted from analysis of the life of seven highly creative individuals who have made recognised contributions in the twentieth century. These individuals are: T.S. Eliot, Albert Einstein, Igor Stravinsky, Pablo Picasso, Martha Graham, Mahatma Gandhi, and Sigmund Freud. Gardner argued that each person has 'multiple intelligences,' and further, that there are seven types of intelligence: linguistic, logical-mathematical, musical, spatial, bodily-kinaesthetic, interpersonal, and intrapersonal. People with high linguistic intelligence prefer to read and write and play word games. They learn from books, lectures and presentations. People with logical-mathematical intelligence like to put things

in order and to solve logical problems. They learn by “using numbers, working with abstract visual information, and analysis of cause and effect relationships” (Logsdon, A., 2018). People with “musical intelligence” are sensitive to rhythm, melody, composition, with natural potential of playing musical instruments or singing. Those with high musical intelligence like to learn by singing or taping information using rhythm or melody that aids their memory. Next, spatial intelligence is the ability to remember pictures and good spatial awareness, for example being able to imagine things in three dimensions. To learn, they use mind maps, diagrams and symbols. People with high levels of “bodily-kinaesthetic intelligence” express themselves physically. They are good at sports, drama and dancing, and to learn they need active learning strategies like games competitions or card ordering, and it is important to take a break from time to time which will enhance their learning abilities. Those who demonstrate a high level of interpersonal intelligence are good at communicating and interacting with others. They learn through teamwork and comparing notes. Finally, people with high intrapersonal intelligence like peace, daydreaming and work following their own time pace. They like to work alone, achieve personal goals, reflect on their experience and are intuitive.

Gardner, when analysing his seven creative giants, found that they had two thematic behaviours in common. All the individuals had a matrix of support at the time of their creative breakthroughs and secondly, they had a tendency to drive a “Faustian bargain,” whereby they gave up many of the pleasures that people typically enjoy in order to attain extraordinary success in their careers (Sternberg, 1999, p. 254).

Gardner’s study provides a useful typology of intelligence that indicates the potential area for creativity among individuals. This typology reflects on personality types, behaviours, and attitudes. Highlighting the link between these personal qualities and cognitive abilities are key factors for this study and one of my research aims. The following section will discuss other studies and theories that consider creativity in relation to; personality type, attitudes, and behaviours.

5.5.1: The Creative Person

The creative person as a special individual with a unique character and abilities was a historic notion popular in the eighteenth century, as discussed earlier in section 5.2. In the United Kingdom, research and studies focused on the creative person and personality type became more prevalent in the nineteenth century due to the rapid development of society and industry.

In his book, *Creativity Theories and Themes: Research, Development, and Practice*, the psychologist, Professor Mark Runco (2014), assures us of the widely held belief that creative individuals are born with creative minds that keep generating innovative ideas until death. However, there is another stream that emphasizes the idea of the ability to nurture creativity as Sir Ken Robinson stated. Runco also makes the point that highly creative people usually suffer emotional pain through isolation and a lack of recognition due to their unconventional lifestyles, as often creative individuals resist being controlled or managed. As a result, they are considered 'gifted' or challenging individuals who ask difficult, fanciful and impractical questions that mostly go ignored. Leonardo da Vinci is an extraordinary example of a creative genius who was incredibly gifted, he was a scientist, artist, theorist and much more. He produced unique creative products and inventions, but he faced life-long misunderstanding.

Many other researchers investigate creativity in relation to the subject of personality.

Guilford was one of the first researchers to attempt to describe the general characteristics of the creative individual's personality in the middle of the twentieth century. It is one of the earliest initiatives that pointed towards psychology and personality rather than uncontrollable power and talents that individuals perceived. His early study influenced several scholars in the field as mentioned in several places in the thesis. He questioned the relationship between creativity and psychology, putting forth some explanations.

For example, Guilford stated that personality could help to explain the meaning of creativity:

“Creative abilities determine whether the individual has the power to exhibit creative behaviour to a noteworthy degree. Whether or not the individual who has the requisite abilities will actually produce results of a creative nature will depend upon his motivational and temperamental traits.” (Guilford, 1950, p. 444)

I’ll discuss Guilford’s work further in section 5.5.2.

After Guilford draw attention to study creativity from different perspectives, psychologists of the behaviouralist school emphasised the importance of studying creativity in relation of behaviours and attitudes in order to understand the relation between personality traits and creative potential. According to Gregory J. Feist (1999), all humans are born with a natural curiosity about how things begin, following a “reductive” reasoning. The Reductive reasoning is “tending to present a subject or problem in a simplified form, especially one viewed as crude” Cambridge Dictionary. However, the level of curiosity, the search for knowledge, and the satisfaction of answers differ from one person to another. These “individual differences and behavioural consistency” are what psychologists have called “personality” (Sternberg, 1999, p. 273).

From the 1960s until the early 1970s the psychological literature on creativity focused on the quality of an individual’s personality. Donald MacKinnon (1966) and Frank Barron and David M. Harrington (1981) considered to be among the key psychological researchers investigating personality traits in the creativity literature. They carried out remarkable research separately on creativity and personality, involving widely recognised creative individuals in diverse fields. They investigated the creative personality in relation to cultural and social contexts, aiming to study personality by considering its social and cultural dimensions MacKinnon (1965) and Baron (1968). MacKinnon (1962) conducted a study, *The nature and nurture of creative talent*, to investigate the relation between individual creativity and working fields. He chose three different disciplines: architecture, mathematics and creative writing. Their findings showed there were clear differences in backgrounds, abilities, and personalities between highly creative groups and lesser creative groups. This indicates that life experience and learning skills have an influence on individual personalities and creative potential.

Teresa M. Amabile and Julianna Pillemer (2012) also researched personality in relation to creative potential. In their study on creative personality, they stated that from the 1950s to 1970s the general idea of creativity could be considered thus:

“Creativity is a quality of a person; most people lack that quality; people who possess the quality - geniuses - are different from everyone else, in talent and personality; we must identify, nurture, appreciate and protect the creative among us – but, aside there isn’t much we can do.” (Amabile and Pillemer, 2012, p. 3)

This leads us to understand that creativity is potentially dependent on personality type, including both giftedness and nurturing factors. Amabile and Pillemer emphasise the significance of natural abilities to the creative personality, while minimising the role nurturing plays in development. This finding discussed in relation to the educational context, in order to justify the theoretical standpoint of personal natural ability that can underpin a practical framework and influence education.

More recently, creativity has been perceived as the production of originality, appropriateness and personal development (Runco, 1993; 1996). For example, Ellis Paul Torrance (1993) indicated that there are several educational approaches that can improve students’ creativity. Torrance stated that:

“Psychologists usually define creativity as the capacity to produce ideas that are both original and adaptive. In other words, the ideas must be both new and workable or functional. Thus, creativity enables a person to adjust to novel circumstances and to solve problems that unexpectedly arise.” (Torrance, 1993, p. 2)

This explanation tempts us to look at creativity as an individual process related to thinking style and as a developing process that can achieve a novel level of productivity.

In the beginning of the twenty first century researchers became more interested in investigating the area of personality after promising findings shown up in the late twentieth

century. They focused on specific themes and perspectives of personality traits in relation to creative potential, with more depth. One of the most significant subjects in the study of personality is motivation in relation to creative potential. Several studies have investigated the relationship between competition and collaboration regarding social influences and creative potential. One of the main conclusions drawn from these studies is that individuality is a crucial element in deciding if collaboration or competition is a motivator of creative potential (Sternberg, 1999; Amabile and Pillemer, 2012; Runco, 2014). The definition section earlier in this chapter, mentioned motivation as a driver for creative potential (Freud, 2001). I will expand this discussion in what follows.

“Necessity is the mother of invention” is a well-known saying, as Runco (2014) states in his book *Creativity Theories and Themes: Research, Development, and Practice*. It is our understanding that invention is a social expression, and is one aspect of creativity necessary for inner motivation. Motivation is a significant subject that has been investigated in the social sciences, both in terms of society as a whole and the single individual. It has also been studied in relation to creativity (Maslow, 1943; MacKinnon, 1966; Csikszentmihalyi, 1997; Sternberg, 1999; Runco, 2014). Motivation is the inner will, desire, or drive to act, think, or behave in a specific way (McClelland, 1987). “Intrinsic motivation is most important for creativity and that extrinsic factor (incentives, rewards, grades or even surveillance) sometimes inhibit creative efforts” (Sternberg, 1999, p. 292). Therefore, individuals with high motivation to be creative or to create something have a higher potential to be creative than others who have less motivation.

In relation to individual personality traits and creativity, Carl Jung believed that individuals should be studied as a complex psychological entity. His idea was that people perceive the world by two mechanisms: introversion and extraversion. Bishop explained the concepts this way:

“the subject can demonstrate a movement of interest away from himself or herself and toward the object, an attitude that Jung terms ‘extraversion’. Or the subject can demonstrate a movement of interest away from the object and back toward his or her own psychological processes, an attitude termed ‘introversion’.” (Bishop, 2014, p. 136)

This shows the idea of perceiving the world subjectively or objectively, in relation to an individual inner voice or an outer social voice. Jung also analysed an individual's thinking, feeling, intuition, and sensing in relation to creative potentials. His theory emphasised that high confidence, risk taking individuals with assertive personalities have a higher potential to be creative. As discussed earlier in section 4.4, Blair (2012) mentioned these personality traits in relation to creative students, which is a significant indicator this important factor should be investigated further.

This theory of personality developed by Carl Jung underpins the psychometric test Meyers-Briggs Type Indicator (MBTI) test developed by Isabel Briggs Myers, and her mother, Katharine Briggs in the twentieth century. Their aim was to develop an applicable strategy that would help individuals and groups to know each other better, and to provide insights to aid interaction with each other (Myers Briggs, 1980).

The main criticism from psychologists on the MBTI strategy is that it is a depersonalised strategy or a 'management tool.' This typological strategy created a link between the theory, behaviour, and attitudes of individuals, which now has a respected reputation. In the twenty first century the MBTI strategy further developed in relation to learning theories, personal education, personal trait and personality type. Recently, MBTI has become a popular strategy in the educational domain, as there were great studies and improvement to the practicality of it which discussed in the methodology chapter in details.

Finally, the subject of the creative individual in relation to education has been studied in terms of the learning environment, teaching strategies, and individual abilities. Kaye Thorne, in her book *Essential Creativity in the Classroom* (2007) defined creativity as the 'original thought,' 'the spark,' 'the ignition,' 'the original design concepts' or 'the blue print.' And in order to have creativity and innovation we need people who are idea-generators, people who modify, and people who allow others to learn from their mistakes. Thorne's ideas align with Vera John-Steiner's work, *Creative Collaboration* (2000), which

emphasises the importance of the personal element in a social context, and the thinking process that generates creative ideas and innovation. The creative collaboration theory encourages building groups of different individuals who enjoy a different quality and style of creative thinking to construct a matrix of creative ideas or innovations collaboratively. Practically, this approach gives an opportunity to every person in the group – be it classroom, company, or organisation – to add different perspectives and angles to the group's collaborative thinking process.

The main issue in the educational domain, is that the traditional classroom is not utilising this opportunity of a mix of different minds among the students. According to Kaye Thorne (2007), most of the students are lumped together in one learning environment and given little opportunity for individual development and learning. "For creative and innovative people, whatever their age, this is even harder" (Thorne, 2007, p. 28). Thus, in the educational domain there is growing attention to progressive learning processes through individual and social activities that develop creative thinking (Vera John-Steiner, 2000).

5.5.2: The Process of Creative Thinking

The process of creativity has been discussed in several domains: as a cognitive process, a learning process or a natural cognition ability. Several cognitive psychologists have studied creativity in a cognitive context in relation to other themes providing valuable theories and models for the process of creativity (Runco, 2014).

Guilford (1967), whom I discussed at the beginning of section 5.5.1, investigated creativity in terms of psychological cognitive abilities that stand in relation to an individual's intelligence, by using a psychometric approach to measuring intelligence levels in relation to creative potential. He developed a theory called the Structure of Intellect (SI) model, which generated interest in the study of creativity in relation to intelligence (Sternberg, 1999; Guilford, 1966). The SI model consists of three basic intellectual dimensions forming a cube of 120 factors. The findings of this study suggest that creativity could be seen as a subset of intelligence, as creativity showed substantial relation to divergent thinking (Guilford, 1967). Guilford used a threshold theory, which is the speed of the

cognitive response to the outer influences, in order to explain the relationship between creativity and intelligence, which suggested there is a correlation between creative potential and intelligence. Guilford (1968) explained the importance of Threshold for creativity, Runco explained Guilford's idea by "the basic idea is that a minimum level of general intelligence is necessary for creative work. Truly creative work cannot be done below the threshold" (Runco, 2014, p. 7). In other words, highly creative work cannot be accomplished if the individual lies below the threshold level of intelligence. On the other hand, Hollingsworth (1942) states that there are relatively very few creative individuals who have an exceptionally high intelligence quotient IQ level. From the last two studies, it could be surmised that creative individuals are intelligent, but intelligent individuals are not necessarily creative.

Review on the creative thinking process models by Paul E. Plsek (1996), reviewed all models constructed by psychologists to explain the cognitive process, in order to develop quality in business. Eight models were discussed in relation to the theories underpinning those models, followed by a composite that included all the themes from the eight models.

The eight models were: the Wallas Model for the process of creativity (1926), Rossman's Creativity Model (1931), Osborn's seven-step model for creative thinking (1953), Barron's Psychic Creation Model (1988), The Creative Problem Solving (CPS) model by Parnes (1992) and Isaksen and Trefflinger (1985), Koberg and Bagnall's Universal Traveler Model (1981), a Model for Creative Strategic Planning by Bandrowski's (1985) and Robert Fritz' Process for Creation (1991).

There are three phases in common between all models: "purposeful analysis, imaginative idea generation and critical evaluation" (Plsek, 1996, p. 132). This indicates that creative thinking starts with "purposeful" targets and ends with "critical verification" developed through an imagination phase.

Five of the eight models considered "problems" to be the spark to generate a creative solution, whereas three models considered a moment of inspiration to be an

uncontrollable event. In fact, problem solving is a significant factor in the study of creativity (Chermahini and Hommel, 2012).

Moreover, neuroscientific perspective studies have contributed to further understanding. Betty Edwards emphasises in her book *Drawing on the Right Side of the Brain* (1993), the significance in considering the differences between the left and the right sides of the brain in the learning process, since the left side is for logical thinking, words, and mathematics and the right is for imagination, creativity, and artistic thinking.

Guilford (1968) studied the processes of creativity through investigating divergent and convergent thinking. Guilford (1968; 1986) suggested that divergent thinking stimulates creative potential and the problem-solving process, as it is employed when individuals are required to solve open-ended tasks or problems. Convergent thinking, on the other hand, is used to achieve conventional solutions. This does not mean that divergent thinking is the same as creative thinking, but it can explain the cognitive process that leads to an original solution or idea (Runco, 2014).

Edward De Bono (2008) is a pragmatic psychologist who created the Six Thinking Hats technique. This technique focuses on maximizing the efficiency of the mind and aims to help groups and individuals to think differently, flexibly and divergently. Edward De Bono and The Six Thinking Hats is a popular thinking process known in the educational and business community as a tool for fostering creativity. The assumption behind the process is that creativity is manageable among all thinking styles and has the potential to be developed, as it all about the technique. Since De Bono's focus is on managing and developing organisational and educational practices that encourage creativity, this connects well with the process of creativity. As this research aims to investigate the process of creativity in interior design, De Bono's theory has been implied as explained in the methodology chapter.

De Bono argues that every person has a mind able to think using different thinking styles, but these thinking styles may be passive and in need of activation. The introduction of his book states that "the main difficulty of thinking is confusion" (De Bono, 2008, p.iii).

Confusion is thus a great challenge today, especially that we all have different thinking styles and process. The problem is how to switch from one way of thinking to another according to demand. "The Six Thinking Hats", is a thinking method that helps individuals and organisations to switch easily from one style of thinking to another using imaginative symbolic of the hats. Each hat of the six has a special colour and special meaning, which means switching from style to style needs only a relatively short span of time. Even if it sounds simple, funny or lacking in complexity, it can be useful in solving serious problems: representatives from top international sectors (British Petroleum (BP), National Aeronautics and Space Administration (NASA) Royal Dutch Shell (Shell), Nippon Telegraph and Telephone Corporation (NTT) and International Business Machines Corporation (IBM)) testify to its efficiency (De Bono, 1999).

Edward De Bono introduced the terms 'lateral thinking' and 'parallel thinking' to explain his theory and its implications. Parallel thinking is "Seeking to solve problems by unorthodox or apparently illogical methods" (De Bono, 2008, p.340). He described lateral thinking as a process of creative thinking that opens the way for new ideas and possibilities. Whereas, parallel thinking is a strategy of group thinking processes when a group thinks similarly together, rather than thinking differently at cross purposes (Kobe, 2011). Parallel thinking avoids conflicting ideas and minimises the confusion level by organising the direction of thinking and thinking styles.

Psychologists like, Robert Sternberg, have emphasised that Edward de Bono has provided strong evidence to support the idea that thinking skills can be developed and are not just limited to especially gifted people (Runco, 2014). Applying parallel thinking is about looking at all possibilities and designing a way forward, rather than choosing one of the possibilities and arguing that the other is wrong, as traditional thinking teaches us to do. Parallel thinking engages and activates both constructive and creative thinking.

De Bono is well known in the business field, however, his practical strategy has been widely applied both in schools and at universities. For example, the University of Malta are applying The Six Thinking Hats strategy to improve the thinking skills both of students and

educators (Malta University, 2017). In fact, numerous success stories stem from the development of thinking skills and creative problem solving, which I will discuss later, in relation to the research data.

Toney Buzan (2006) is a British psychologist who originated the Mind Map thinking technique. He states that the motivation behind this technique is his personal struggle to remember and take notes of all that has been said in lectures. He developed the Mind Map technique in order to improve thinking efficiency both holistically and creatively. He states that humans normally tend to think by using only one side of their brain: either the left or the right.

Buzan emphasises that people should use different activities, activating both sides, in order to be 'whole-brained'. He argues that the Mind Map approach develops powerful ways to help students or other individuals to remember, analyse, think and express their ideas and thoughts using both sides of the brain. The development of this thinking technique suggests that having the two sides of the brain active and thinking in two different ways will encourage creative thought, as well as stimulating other modes of thinking. These theories in general, relate to education and to the common understanding of how humans think and learn.

5.5.3: The Creative Product

As stated earlier in this chapter, in the middle of the nineteenth century the value of production and innovation became essential (Runco, 2014). Creative products and innovations have solved major problems and fulfilled social needs and desires (Boorstin, 1992; Weisberg, 2006). Though, further attention was directed back to the creative production, especially that it comes parallel with mass production movement.

Distinguishing the creative product from the creative idea or the creative person is an important initial step in studying each kind of creative output independently. As this thesis shows, a considerable number of scholars and psychologist emphasise the importance of creative production. Some believe generating creative ideas is a common human activity that happens every day, while some believe taking these ideas further to make original,

functional, and socially appreciated products is creativity (Bean, 1992; Andreasen, 2005; Runco, 2014). One such psychologist, Sharon Bailin (1988), stressed that the production of products with aesthetic, functional, or any other values is the only way of viewing creativity. Another psychologist, American Professor Morris Stein, who valued creative product conducted a study focused on creativity as a process, examining the factors that influence creativity. He also defined the creative product or work as follow:

The creative work is a novel work that is accepted as tenable or useful or satisfying by a group in some point in time.... By 'novel' I mean that the creative product did not exist previously in precisely the same form. (Stein, 1953, p. 311)

His definition emphasised the two main factors that should be in a creative product: to be novel and an original work, and to be appreciated by a group of people as a useful and satisfying product. This second point of social appreciation of the creative product is essential, as it is challenging to evaluate and assess creative products out of community that will recognise it. These criteria of originality, functionality, and social appreciation are crucial to distinguish creative products in the wider production process. As it is highly relative and subjective if it is out of limited community. Originality is a fundamental component in creative product (Runco and Jaeger 2012), but not every original product is a creative product (Cropley, D; Kaufman, J.; and Cropley, A, 2008).

In relation to interior design, discussing the creative product will come from two perspectives; the academic, and professional practice. Within the academic domain, the final product in all interior design programs is usually a design project. Although, students are designing for a place, the visuals produced are sketches, mood boards, virtual plans, 3D models...etc. Whereas, in the professional practice of interior design, the final product is a place where people live, work, etc. This mismatch of the expected final creative product is a considerable challenge for interior design educators, as it is hard for most students to stay focused on a final product representing a space that does not exist. As a result, a substantial number of students focus intently on the visuals they produce, rather than the place they design. Thus, currently in most interior design institutions, having entrepreneurial experience has become a mandatory part of the program, in order to

develop their spatial awareness when they design places (Guerin and Thompson, 2004; Sully, 2012).

5.5.4: The Creative press

Significant attention has been paid to investigate creativity in social and cultural contexts due to the influence of its social aspects (Runco, 2014). Creative work and creative potential would go unrecognised without this social acknowledgement. Not only does this indicate the essential value of the social aspect of creativity, but this social perspective has influenced the definition of creativity. According to Csikszentmihalyi (1997, p. 28), creativity is “any act, idea or product that changes an existing domain into the new one” and the creative person is thought to be “someone whose thoughts or actions change a domain or establish a new one”. He emphasises that the creative product or person should be viewed within their social or cultural context. Csikszentmihalyi states that three elements interact to generate a creative idea, product or person: the culture with symbolic rules, the person who brings novelty, and the experts in the domain who validate and recognise this novelty.

Several studies support the idea that competition, collaboration, organisation, and the judgement of society have a huge impact on creative potential and performance (Florida and Goodnight, 2005). Contemporary social psychologist, Vlad Glăveanu, has published several texts discussing creativity in the social and cultural context. He argues that the “trajectory” of creativity has been influenced by three paradigms: the *He*-paradigm, which concerns individualistic approaches that construct the norm, made up of the “unique” individuals that the pronoun *he* describes. Second, the *I*-paradigm is the natural creative ability that is inside every person. Finally, the *We*-paradigm concerns the impact that social influences have on the creative process, as discussed above (Glăveanu, 2010). This last paradigm aims to improve the general approach of understanding and analysing creativity by looking at the subject holistically, including all levels, from individuals, to groups, and cultures (Glăveanu, 2010).

5.6: Summary

This section has summarised an overview of the literature of creativity in three ways; the linguistic definitions, the educational understanding of creativity, and the social context of creativity research. Creativity as a term in the dictionary has several meanings, within different contexts. A creator (god or person), is an individual who creates or invents something not in existence before. Creating is the process of doing, and a creative product is the original outcome of this process.

In education or pedagogy, it has eleven meanings that are used in teaching the subject; whether in constructing the learning topics, learning outcomes, student criteria, or even assessment and evaluation. As stated, it is important to articulate the conceptual meanings of creativity to achieve the practical goals and objectives. As interior design pedagogy is at the heart of this research, this section is important to understanding the broader sense of creativity for the pedagogical realm.

In the social and psychological context, this chapter provided a brief discussion of the different aspects and directions scholars have taken to study and understand creativity. For ease and fluent reading, this section divided into; person, process, product, and press, reflecting Gardener's 4Ps theory. This section has provided the conceptual framework that the methodology is built upon.

Chapter 6: Research design and methodology:

6.1 Introduction

Methodology is the bridge that links the researcher from the land of curiosity to the ground of contribution to knowledge. As stated in the first section of the literature review, this research aimed to find answers for the following questions:

- 1- Why it is important to develop the pedagogical theories and practice in interior design education?
- 2- How can interior design educators foster students' creativity in the pedagogical domain?
- 3- What are the significant factors that play an important role in developing students' creativity and pedagogical practices in the domain of interior design?
- 4- What are the conceptual understandings of creativity and how do students define creativity?

By answering these questions thoroughly the research aims will be achieved, and it will contribute to building the body of knowledge of interior design education. To achieve these aims, four objectives have been formed to guide this research:

1. Observe and document the current practice of the interior design studios in Higher Education (HE) institutions in the UK.
2. Understand the implicit concept of creativity among interior design students' and educators in interior design HE institutions.
3. Investigate the relationship between students' perceptions of creativity in relation to their personality traits, behaviours, and attitudes.
4. The data from the three points above was utilised to reveal new potentials for developing pedagogical practices in interior design studios.

These aims and objectives formed the skeleton of the methodology of this research.

This chapter is divided into seven sections that reflect on the seven steps I followed while conducting this research. Section 6.2 discusses the theoretical framework, including the epistemological, ontological and methodological perspectives adopted in this qualitative

research. In Section 6.3 I explain the information needed and why I have chosen qualitative methods rather than quantitative, and why I have decided to apply a Grounded Theory research approach among other qualitative approaches.

Section 6.4 explains the research map which shows the links between the literature, the research aims and objectives and the theoretical framework of the methodology.

Section 6.5 discusses the research methods, namely ethnographical observations and semi-structured interviews. The discussion includes the pilot, sampling strategy, and application process, along with the process of collecting data in of the three institutions.

Section 6.6 discusses the data analysis used for the collected data and will explain the plan I have followed to link the raw data to the research aims and objectives. This was a critical stage for discovering which findings were worth working on and which theories were valuable. It was also a very creative stage because Grounded Theory requires highly 'creative' thinking.

Section 6.7 discusses the research design for the whole research. It will give a step-by-step explanation that reflects the information in the research map, methods, and data analysis. It will emphasise and justify the decisions that have been made; why I have chosen these methods and placed them in this order; why these specific factors and this sampling strategy have been chosen and so on.

Section 6.8 discusses the ethical considerations regarding all the issues I came across during fieldwork and those that I considered in designing the research. The ethical discussion will include the main values for the research, it will discuss the issue of trustworthiness both in relation to qualitative research in general and to this specific research context. Finally, it will describe the triangulation process I applied to ensure credibility of the data.

6.2 Theoretical Framework

As I discussed in the literature review, the term, 'creativity' has no well-articulated meaning in the discipline of interior design. There is also a degree of ambiguity and complexity in understanding and defining creativity. However, I attempted to understand the term within interior design pedagogy for the particular purpose (Pederson and Burton, 2009) of fostering student creativity.

Mark Runco in his book, *Creativity Theories and Themes* (2014), reviewed major theoretical perspectives on creativity and reflected on the interdisciplinarity of defining the term. The nature of interdisciplinarity involved in creativity has created this level of complexity in defining it. Thus, specifying the context can narrow down perceptions and simplify the analysis of the term. This concept, to specify to context, has underpinned the aim of the research in articulating the meaning of creativity in interior design pedagogy.

As the aim of this research was to investigate the perceptual framework of creativity in interior design pedagogy, and to develop a pedagogical practice that is able to foster students' creativity, I've chosen a Grounded Theory approach to the research. According to Glaser and Strauss (1967) and Strauss and Corbin (1998) Grounded Theory is a methodology that aims to construct a theory about issues or phenomena in peoples' lives through inductive data collection. Grounded theorists start the research without any preconceived perceptions or expected hypothesis about the research outcomes. This point is critical in order to build a theory without bias or omission. The Grounded Theory approach, therefore, was adopted to construct an independent theory for the field of interior design pedagogy.

After reviewing several qualitative methods, I chose ethnographical observation and interviewing as my research methods because ethnographical observation would give insights to understanding the studio environment, while interviews would help to define creativity within this discipline. Actually, student responses were the main source for developing the theory of creativity, which was fundamental for developing the interior design pedagogy in this study. Educator insights and observations helped me to construct

a thoughtful and rational theoretical framework for the theory of creativity within the research.

The **methodology** of any research is a matter of how people gain knowledge about the world (Denzin and Lincoln, 1998; Ritchie and Lewis, 2003). The qualitative approach of this research aimed to investigate complex sociocultural circumstances. As stated above, the justification for choosing the qualitative approach is that certain complex circumstances, especially those involving social factors, need an in-depth research approach, such as that provided by qualitative methods (Atkinson, 1996).

This research set out to investigate the complex subject of creativity in interior design education, and as such, required an in-depth investigation. Marshall and Rossman discuss different approaches to applying qualitative methods in social science research in their 2010 book, *Designing Qualitative Research*:

For study focusing on individuals' lived experience, the researcher could argue that one cannot understand human actions without understanding the meaning that participants attribute to those actions—their thoughts, feelings, beliefs, values and assumptive world; the researcher, therefore, needs to understand the deeper perspectives captured through face-to-face interaction. (Marshall and Rossman, 2010 p. 57)

Here, the authors suggested that researchers in social science should take an in-depth research approach to investigate ambiguous, complex matters in order to better understand the situation by having a closer view of all circumstances. Conversely, taking an objective stance may miss essential data that would clarify the sociocultural context in a more profound way. In other words, using quantitative methods alone, for example by testing hypotheses through questionnaires, could not achieve a thorough understanding of complex social issues. This research has therefore adopted a qualitative research methodology, to equip the researcher with the tools to dive deeper.

Coming to these two perspectives with no preconceptions, as a Grounded theorist, meant that I could learn from both student and educator positions to construct the meaning of creativity in the interior design field. Whereas, ethnographical observations allowed me to understand the world of the interior design studio. Thus, Grounded theorists start the

research without any preconceived perceptions or expected hypothesis about the research outcomes. This point is critical in order to build a theory without bias or neglect (this point will be discussed further in the triangulation section).

Epistemologically, constructivism theory works well with the Grounded theory research approach. Therefore, an interpretive constructivist approach was the adopted epistemology of this research. Constructivists assume that social worlds are interpreted by individuals, and that if we want to understand the phenomena of social life, we need to consider these individual perceptions (Heshusius and Ballard, 1996). This epistemological approach leads to the theory of social constructivism, which states that societies construct interpretations, concepts, ideologies, theories and behavioural systems in accordance with their social goals and needs. In other words, social constructivism interprets the world through the perspectives of social culture.

Another influence of social factors on certain practical domains is the “community of practice.” According to Jean Lave and Etienne Wenger (1991, 1998, 2002) there is a concept of learning exchange and shared practical experience within specific social groups called the ‘community of practice.’ Wenger says, “Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.” (2002 p.4). This theory stresses the importance of developing individual capability through creating, expanding, and exchanging knowledge among the members of a community in a specific domain (Wenger *et al*, 2002 p. 45). As will be shown in the findings and analysis chapters, the notion of community of practice do exist in the domain of interior design.

As shown in Figure (5) the research interpreted observations of the interior design studio environment, such as physical location, actions, behaviours, and conversations within the studio setting, to understand their position, needs, and responses to the current practice of interior design pedagogy. Taking the constructed meaning of creativity based on student perceptions, I triangulated the views of educators to validate this construct. The focus, therefore, lies on the dialogues and actions of students and how they formulate

concepts and practices that reflect their own creativity in the studio. This epistemological perspective highlights the significance of understanding socially constructed meaning and concepts within a specific context or culture.

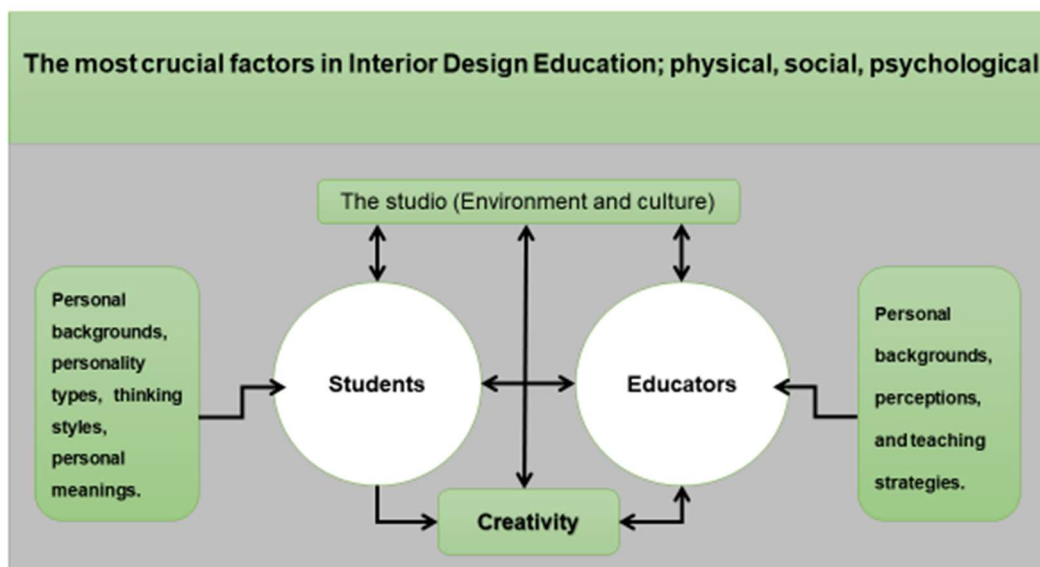


Figure 5 a diagram that presents the interior design education mind map. Studio is the physical place that hosts all activities. Educators and students are the main social factors responsible for all activities. Creativity is the psychological factors that underpin all activities.

Ontology is a philosophical conceptualisation of metaphysical questions about being, becoming and reality (Bernstein, 2011). Subjectivism, Objectivism, Relativism and some common theories with different ontological perspectives. Relativism was chosen, as it states that each culture, paradigm, society, form of life or theoretical framework contains shared meaning, rationality, rights and concepts that are all applicable within the context (Bernstein, 2011). This research focused on creativity due to its fundamental role in interior design, and its aim was to articulate the meanings, concepts, values and thoughts relevant to creativity in the educational context. This is the rational justification for adopting Relativism as the ontological basis of the methodology in this research.

Moreover, obviously students and educators, who are the individuals of this culture, have constructed these meanings, perceptions, behaviours and expressions in relation to their

experiences and conceptions about the field. Each individual among them has a relative personal perception of what creativity is in the context of interior design (Craft *et al.*, 2001). Thus, the study focused on students' perception of creativity and considered the educators' views as part of a verification process (de Souza Fleith, 2000).

However, pedagogically, this was a conceptual dilemma (Craft, 2003), as individual interpretations existed but were not fully articulated or understood. One of the aims of this study was to understand the concept of creativity within the context of interior design pedagogy. In design education, defining creativity and dealing with it practically is still considered vague and surrounded by conceptual complications, as there are no clear implications in the pedagogical practices (Denmead, 2011).

In addition to that, there are already broad considerations of educators' perspectives on creativity, but limited studies consider students' perspectives in the studio and/or classroom (Robinson, 2014; Runco, 2014). As discussed in the literature, the studio is the common place or culture that contain all pedagogical communications and interactions take place, especially in art and design domains (Carmel-Gilfilen, 2012; Goldschmidt, 2010).

As discussed in the literature, the study conducted in Akdeniz University by Hilal Tugba Ormecioglu and Aydin Ucar's (2012) revealed important findings regarding their methodology. They emphasised that considering students' perspectives can lead to thoughtful development in education, as students can articulate what is missing or needed in their instruction. In other words, the qualitative methodology they applied values the experiences of people in the field and considers that experience as a source of data. Furthermore, I realised that valuable data could be collected through the Grounded Theory research methodology, hence, this study and the methodology itself inspired me to include students' perspectives for this research to better understand the current nature of the interior design studio, and to envision the development of studio. Additionally, student questions which came out of the interviews, inspired my inquisitiveness within research.

Moreover, the qualitative research approach in this research set out to understand and

developing interior design educational strategies by responding to signs in the experienced field. Qualitative research is defined as “social research that is aimed at investigating the way in which people make sense of their ideas and experiences” (Savin and Major, 2013 p. 11). Thus, researchers in social science today use qualitative research approaches to provide a flexible methodology allowing them to solve social problems thoughtfully and holistically. The full theoretical framework of the Qualitative Research Methodology (QRM) will be discussed in the research design section.

What Information is Needed to Answer The Research Question?

The typical information areas needed for qualitative research can be categorised under four domains: contextual, demographic, perceptual and theoretical (Bloomberg and Volpe, 2008). This section describes what information is needed under these four subsections and the methods used to collect the data.

The **contextual information** of this research is a description of the interior design studio. The culture and environment of the interior design studio is the main hub for all interactions and behaviours between students and educators. According to Lewin (1935), human behaviours are constructed through the interaction between the individual and their environment. This theory is adaptable in a situation when the aim is “to understand the learning behaviours of a discrete segment of a population in a particular organizational or institutional setting” (Bloomberg and Volpe, 2008 p. 70). Practically, one of the research aims was to understand students’ creativity in the learning process. For the interior design context, this process mostly takes place in the studio. Although the physical environment was not the focus of this study, it has been taken into consideration in order to capture a full description of the interior design studio culture. The description includes the built environment, facilities, equipment, and the studio projects themselves. Three institutions were described in three case studies, using the ethnographical observation method.

I collected the **demographic information** from the participating students through induction questions at the beginning of the interviews, as it provided a smooth beginning to conversations between the students and myself. Usually, this information is collected

via information sheets, interviews or questionnaires. The typical demographic elements considered in social research are age, gender and nationality. I applied these demographics in this research as well. As stated before, the two types of participants were educators and students.

Educators' demographical data was used in justifying and explaining the educational and social situation. For example, the age factor played an important role in understanding educators' perceptions and educational background. As shown in the table below, in the first institution there were three males educators who had more than thirty years' experience in art and design education. Whereas, the other two institutions had younger male and female educators, which indicated more involvement of females in education.

Regarding the student demographics, gender, age, and ethnicity were considered partially. **Gender** typography has an influence on the culture of any community and effects the nature of a culture (Kufman, 2006). Male and female students were included in the observation by recording their numbers to capture gender influence on the studio culture. In the interviews, gender was taken into consideration as it could explain some personal attitudes and actions.

Table 1 A table represent educators' gender and age across the three participate institutions.

Institution	Older Educators		Younger Educators	
	Male	Female	Male	Female
Institution (1)	3	-	-	-
Institution (2)	-	-	2	2
Institution (3)	-	-	2	1
Total number	3	-	4	3

As regards students' **age**, there was no strong focus on it, as the age of the participants typically ranged from 18 to 23. However, special consideration and notes were taken with older students. For instance, in one institution there were three students between forty

and fifty years old. Taking special note of their age was important, as it provided further explanations for some of their perceptions and behaviours.

In fact, the age was controlled by the study year, despite the fact that the programme leaders had the right to choose which level in the programme could be interviewed. For instance, the first institution was closing down, so only third-year students were left to participate, while the second institution allowed me to include only second-year students, to avoid any extra pressure on the third-year cohort. To balance it, in the third institution I included the second and third year students as they were willing to participate.

Generally, the invited students were from year two or year three (undergraduate students). The rationale behind this control was to include students familiar with the design process and studio culture, more than foundation or first year students. The programme tutors informed students in the second and third year that there was no obligation to participate in my research. This flexibility gave students the freedom to participate without pressure, which was important in obtaining quality data.

Ethnicity is an important factor in understanding personal creativity in any social context (Kufman, 2006). Students with different ethnical background have different cultural expectations and understanding of creativity, and they will experience different pedagogic power. All participating students were observed in the studio regardless to their ethnicity or nationality. However, in the interviews only one question was posed pertaining to ethnicity, which was “*Where are you from? And why did you choose to study interior design in the UK (for international students)?*” This was to include the influence of educational background on students’ perceptions and creative attitude in the studio.

The **perceptual information** of a study is a fundamental part of any research. Bloomberg and Volpe explain, questions about perceptions “are neither right nor wrong; they tell the story of what participants believe to be true” (2008 p. 71). This statement gives a general sense that collecting these implicit thoughts and ideas from students and educators provided valuable explanations of human behaviours, actions and decisions. Additionally, observation provides another angle of the reality. Therefore, Classic Grounded Theory

CGT and Constructive Grounded Theory were adopted in these phases. CGT is more objective in discovering the results, whereas Constructive Grounded Theory is more subjective in dealing with data (Charmas, 2014).

As the aim of this research was to investigate the perceptual framework of creativity in interior design pedagogy, to develop a pedagogical practice that is able to foster students' creativity, the methods of collecting data focused on gathering individual perceptions and understandings of creativity from educators' and students' perspectives. It was essential to comprehend, in depth, the existing circumstances of interior design education in order to develop future educational practices. This concept of constructing knowledge from the existing social context to build upon it is the core idea of Grounded Theory, and the reason I chose to research within this methodology.

Theoretical information “includes information searched and collected from the various literature sources to assess what is already known regarding your topic of inquiry” (Bloomberg and Volpe, 2008 p. 71). As this qualitative research has adopted Grounded Theory as its research approach, the theoretical framework will be deduced inductively from the collected data.

The literature provided a general overview of related key theories in education, interior design – as professional and educational practice – and definitions for creativity, both linguistically and within education. However, while there was not a great deal of literature on creativity, its description for the interior design studio was guided by the data and will be discussed in the following chapters. Therefore, the overview of these subjects provided insights and influenced the choice for an appropriate methodology. As stated in the conclusion of the literature section, the development of interior design pedagogy is necessary but the directions are not clear. Thus, Grounded Theory was chosen to creatively and practically lead the development throughout this research.

6.4 The Research Map

This section provides a holistic view of the research map, from the research question to

the results and findings, as this study investigated the sociocultural factors regarding creativity in the context of interior design education. It illustrates the processes of navigating and understanding the ambiguity in the domain, using empirical materials in the fieldwork and data analysis.

Figure 6 shows the five phases of the research. The first grey square is the research aim and the green squares show the research questions. Following them the blue squares show the objectives, and the yellow squares show the recommended methodology that will lead to these objectives and answer the questions in the green squares. The orange squares present the data analysed from this methodology and finally the purple squares present the constructed answers that reflect the research questions. The following chapters will discuss this process in detail.

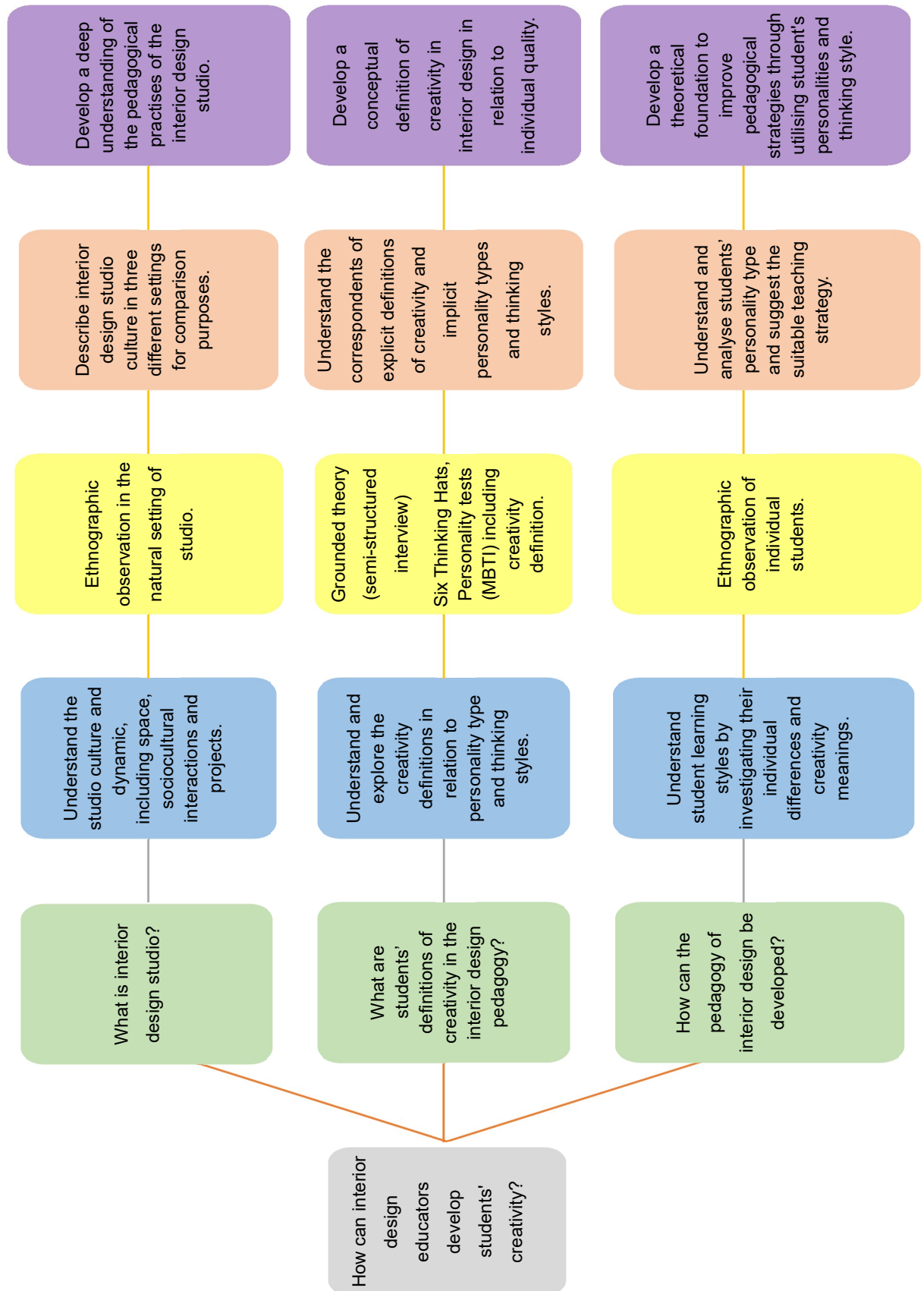


Figure 6: the research map from the beginning of the research to the end.

6.5 Methods

There were two main qualitative methods implied in this research: ethnographical observation and semi-structured interviews, both are discussed as follows.

6.5.1 Ethnographical Observation

Ethnography means “the study of people, cultures and values.” (Savin-Baden and Major, 2013 p. 196) It is the method by which we understand a culture and the values that lead the people in this culture to behave and think the way they do. According to Malinowaki (1984), ethnographers should live for weeks or months in the natural setting of the culture under investigation, until they have gained a full image and can construct explanations about this culture from a native’s point of view. Aspects such as aspirations, feelings, desires, interests and the substance of happiness are essential and meaningful if we are to understand any culture or social group. The Chicago School of Sociology developed the application of ethnography in order to become more flexible and locally adaptable in in-depth studies of specific social groups in society. Ethnography has been adopted as a research approach in the study of elderly people in society (Sayago and Blat, 2010) and clinical practice (Gabbay and Le May, 2004), and has been used most heavily in education (Wilson, 1977; Smith, 1978). Ethnographical observation began in the 1870s and by 1940 was widely used (Kawulich, 2005). In architecture, it has been used in both educational (Bell, 2004) and practical (Cuff, 1992; Demian and Fruchter, 2006) contexts.

The ethnographic approach has not been adopted in this research as a holistic methodology, but rather, an element of ethnography that has been synthesised with the observation method. This combination has been created because it is the most profound method enabling the researcher to study everyday dynamics in the studio. It shows the behaviours, actions and conversations that reflect both implicit and explicit meanings, thoughts, perceptions and information.

The rationale underpinning this combination is that the interior design studio is a culture that needs to be investigated in an ethnographical manner, however it is not possible to

live in this culture, as it is limited by designated studio time. The students and educators are seen as the natives of this culture, while the tasks, project briefs, and assignments are considered to be its cultural pattern. This approach has the goal of “understanding the complex world of lived experience from the point of view of those who lived it” (Denzin and Lincoln, 1998 p. 221). Ethnography has evolved from a strand of social science research, which involves researchers living in a society to study its culture (Garson, 2008; Agar, 1996). However, in this study I will not live alongside educators and students, but will rather focus on the everyday life practice of studios (Agar, 1996).

6.5.1.1 Observation Sampling

As this research investigated the interior design studio, the logical target sample was the interior design studio in a higher education institution in the UK. The rationale behind focusing on the interior design studio in order to investigate “creativity” was to think of the studio culture as box of secrets containing common meanings, perceptions and behaviours of this culture.

Since this qualitative research has adopted a Grounded Theory approach, the method for selecting the research sample was the theoretical sampling strategy, which examines participants who were able to contribute to the evolving theory of the study. The criteria for sampling were, first, that it is to concern interior design programmes only, interior decoration and interior architecture were excluded. Second, that it include Bachelors degree students only. Diploma, Masters and Foundation levels were excluded. Third, only accredited institutions in the ministry of higher education were considered, and finally only those based in the UK met the criteria. Thus, the sample of the study consists of interior design departments in accredited higher education design institutions in the UK, at a Bachelor’s degree level.

As the BA is not as advanced as a Masters in Art (MArt) degree or Masters in Design (MDes), nor as basic as the Foundation of Art (FoA). The Higher Education institution criterion was chosen in order to ensure a high quality of teaching. All institutions I contacted were listed in The Universities and Colleges Admissions Service (UCAS),

United Kingdom public sector information website created by the Government Digital Service (Gov.UK), and The Quality Assurance Agency for Higher Education (QAA). There are several commercial institutions that teach interior design, however, with regard to standards, the learning strategies and qualifications given are different and varied. Thus, limiting the level of degree to ensure equality of this variable was important. Moreover, limiting the research focus within geographical boundaries was widely applied. Narrowing down the research focus to one country ensured the feasibility of the study.

After explaining the sample criteria was formed, I shall now discuss how the actual sample was chosen. In the first stage, I gathered the names of only accredited UK institutions that offer Bachelors degree programs in interior design. According to the Universities and Colleges Admissions Service (UCAS) website, there were thirty eight interior design programs in 2013. Whereas in 2017 the number of institutions reached forty nine Interior Design BA programmes across the country and eighty two programs related to Interior Design (UCAS, 2017).

Then, I chose the ten most popular institutions using the ranking reviews in the UCAS website. Popularity was an important factor as it highlighted the factors that matter with students when they search for an interior design program. It also illustrated how these institutions built up their reputations through practice. I contacted them via e-mail and attached an information sheet about my research that included information on their rights, asking them to participate in my research. In the e-mail, I introduced myself and explained my research aims. I received seven replies, with four declines and three institutions agreeing to participate in the research. I had already intended to start with three cases, since each case would require a full term of fieldwork to collect the data. Then after collecting the data, I could decide if a fourth case was needed or not, as this was the maximum period of time I could dedicate to field work in the PhD, as will be discussed below in the limitations section.

However, to get three cases as soon as possible I contacted ten institutions in the first instance. Each of the three institutions was considered a case and the same data

collection process was followed for each. The process started with ethnographical observation and then turned to semi-structured interviews with students and educators. The research design and methods were identical across the three cases. In observation, the focus for each sample was the physical environment of the studio, the interior design students (language, behaviour, and actions), the interior design educators (language, behaviour, actions) and project development milestones from the beginning to the end. The data collected was in the form of documents, notes and tables (as will be explained in detail later). The students were interviewed in the middle of the semester, on different days depending on their time constraints. Educators were interviewed at a time suitable to them. I tried to be as flexible as possible to gain the most from these occasions. The data was collected in audio format and was then transcribed into Word documents.

6.5.1.2 The Application Process of Observation

The participating students were in their second or third year of study, making them more familiar with the studio culture than first-year students would be.

My observations were divided into two types: ethnographical observations of a normal day in the studio and observations of student presentations (mid-project or final). The following section will discuss the implications of observation and highlight the differences between the two types. I set out to observe the studio of each chosen institution for a minimum of four full days, with no maximum number of days, since I wanted to observe as much as possible. The rationale behind this observation pattern was that four days of observations was the minimum time required to construct an image of the studio and get a grasp of its basic norms.

Each observation session lasted for one full studio day (as stated in the students' timetables). I arrived before the students to arrange access procedures, and left after the official end of the studio session, when there was nothing more to observe. I entered the studio quietly, smiling, and took a seat with the students so students and educators could be seen and heard without any physical difficulty or visual interference.

The basic skills that I learned by observing people was to understand the difference between 'looking' and 'seeing', and 'hearing' and 'listening'. It is a reflective, insightful and complex mental skill that makes a considerable difference to any observation method. Personally, this was the most critical skill that I had to develop for this, as well as for future research. Indeed, any observation site is full of information, much more than can be captured with only note-taking, without filming or recording.

Therefore, in a normal observation day I had to focus on all activities and dialogues in the studio and I wrote a summary of each hour, every hour. By the end of the day I had connected all the dots, creating a meaningful image. This observation strategy kept my mind free from restriction, and writing every hour was a powerful strategy for documenting facts and capturing observed information as soon as it occurred, before being forgotten or lost.

For individual observation of students' presentations I had a specific template for note-taking. There was one copy of the template for each student, which consisted of a table listing behaviours, language, the main ideas of the project, the general characteristics and personalities traits of the students.

The semi-structured interview format was chosen to limit the power of researcher interpretations, thus serving to work against factors of researcher subjectivity and bias. The combination of ethnographical observation and semi-structured interviews has been applied across different studies in diverse disciplines. In the literature, it is considered to be a triangulated methodological framework (Bazeley, 2013; Kawulich, 2005). The next section will discuss the method of the semi-structured interview.

6.5.2 The Semi-Structured Interview

The interview is one of the most popular research methods and is applied across all disciplines (Savin-Baden and Major, 2013). Its popularity is due to the ease of collecting data in this way. However, one of the greatest concerns of the interview format is that data unrelated to the research aims and objectives can be easily collected, creating

fragmented research. Therefore, when conducting interviews, researchers should focus on the aims and objectives, the data they seek to collect to fulfil these aims and objectives, and which interviewees pertain to this information (Yin, 2003). To reiterate, the aim of this research was to understand creativity, conceptually and practically, in interior design education by clarifying both student and educator perspectives. Therefore, the interviews specifically focused on students and educators in interior design departments, to collect their cognitive responses, perspectives, thoughts, beliefs, desires, motivations and values on creativity. The collected data revealed the personal implicit meanings that underpin the explicit behaviours in the studio. This complemented the data from observation (Banister, 2011; Bell, 2004).

There are several types of interviews: structured, semi-structured, and open. Choosing which one to adopt depends on the research aims and objectives (Bloomberg and Volpe 2008). The choice of method is highly dependent on the purpose of the research. The structured interview is a useful method for collecting specific data when seeking limited answers. The open interview is usually used in ethnographical, historical and biographical studies, where the researcher asks the interviewee a question and gets extensive and lengthy answers that are completely controlled by the interviewee. The semi-structured interview stands in between these two, allowing the researcher to control the interview subject, with the freedom to ask further or unstructured questions for more clarification or explanation. Meanwhile, interviewees are given the chance to speak as much as they want.

6.5.2.1 Interview Questions for Students

Structuring the interview questions was the most challenging step in preparing for data collection. The information needed concerned implicit information such as, personal experience, perceptions, thoughts, meanings, desires, motivations and values, in relation to explicit information like behaviours and attitudes regarding creativity. Thus, it was not clear whether to make the questions direct or indirect (Amabile, 1983; Craft, Jeffrey, and Leibling, 2001; Kaufman and Sternberg, 2010; Banister 2011). Therefore, the interview

questions were constructed as a tool to focus on every student personally, which I explain below. This also justified why interviews were conducted individually, although it was time consuming. The target was to get the personal information without any influences. Thus, timing was a crucial factor to consider. I had to schedule the interviews in relation to the case study time-allowance, the time given to observation, the studio project stages, the semester parameters, and the limitations of my PhD time.

The student interview questions were divided into three sections: first were questions about personal background and data, followed by questions from the MBTI personality type test, and third were questions about personal thinking style. I constructed the first section by myself, second section came from the MBTI personality test, and the third section was inspired by the Six Thinking Hats strategy. Each section of questions had a purpose to capture information about personal creativity, as I decide to not ask direct questions about creativity. Throughout the questioning, students mentioned the term creativity, and my reply question was “you just mentioned creativity, what do you mean by creativity?”. It was a risky decision to wait for the student to say the word, but it worked and most importantly it helped students to figure out what they meant unconsciously when they said it. I was seeking personal meaning for the term in the context of interior design, not seeking a general abstract meaning.

The questions were:

- 1- *Why did you choose to study interior design?*
- 2- *Why did you choose to study interior design in the UK (for international students)?*
- 3- *Why did you choose to study at (the name of the institution)?*
- 4- *Which year are you in?*
- 5- *What kind of skills or interests do you have that drive you to study the interior design programme?*
- 6- *How would you describe your experience studying interior design? Why?*
- 7- *Is the studio environment: helpful? Supportive? Encouraging? Inspiring?*

- 8- *Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?*
- 9- *Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?*
- 10- *What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?*
- 11- *Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?*
- 12- *How do you see yourself as an interior designer in the future?*

As shown above, the first section was a group of twelve supplementary questions focusing on personality traits and behaviours through understanding their personal cognitive reasoning for their decisions, perceptions, behaviours, and attitudes. The first four questions were ice-breakers and explained how the students constructed their decisions. It captured their motivation to study interior design, for example, was it an internal desire or external pressure. Questions number 5, 6, and 7 were mainly to capture their perceptions about the learning experience in relation to their abilities, curriculum, and studio, which indicated significant factors impacting their learning experience. Questions 8, 9, and 10 captured student's design thinking and their perception of projects. The final two questions were to capture their personal impression and attitudes about past experience and the future.

The second section was a group of seventeen questions from the Myers-Briggs Type Indicator[®] (MBTI), the validated psychological test to indicate personality type. This rigorous and well known test was used to identify personality type in different domains, by analysing the different characteristics and traits of people.

In this research, the MBTI questions have were utilised to identify the personality differences from the different responses by students to design projects during their undergraduate education. The test was part of the interview, and it was in response to and supported the first section questions in a more rigorous manner.

The first part of the interviews comprised my initial questions to understand the different personality types among students. The second part was the supportive supplementary questions that ensured the validity of the questions in the first part. This balance between new questions and a validated test ensured the reliability and validity of the method, as will be discussed in the pilot process. The two main references adopted for this process were *Differentiation through Personality Types* (Kise, 2014) and *Personality in the Classroom* (Hodgson, 2012), as the theory developed to fit in the educational domain with further one-to-one analysis. These two books were chosen as they kept the original theory, test, and analysis. These texts offered non-psychologists, like me, additional explanations with a simplified method to use the test and its results.

Both authors are aligned with the original MBTI test, however they explained the correct way to use the test and analyse it without facing the issues discussed in the creativity section, such as, over relying on the results of the test and ignoring a person's voice. Malika Power, the Head of Modern Foreign Languages at the Duke of Kent School in Surry, UK pointed out that the comparisons and metaphors used in the books can easily help teachers and students to understand where others are coming from.

More precisely, the books provided better and easier explanations of the original concept behind the MBTI test, in a way that was accessible and applicable for educators and students. In addition to reviewing these texts, I did a piloting process which I will discuss below.

Myers and Briggs theory and testing tool have been utilised in several studies and academic fields. Doctoral research conducted by Debra K. Sanborn from Iowa State University in 2013 investigated the relationship between the personality type and academic success in the first semester in the university. The study included first semester students from 2006 till 2011. University grades were used to measure success level. The result showed a positive relationship between personality type and success. Further studies and investigations in this area had similar recommendations. Furthermore, the MBTI test has been applied in several universities such as, Indiana University, and Ball

State University in the USA, and Durham University in the UK, as a guide to help students figure out their future career.

In this research, MBTI was used to uncover any chance for better communication in the interior design studio between students and educators by using the available explicit information (verbal, behaviours, and attitudes). The intention of these interviews was to (a) show the link between possible questions that might normally be asked in the studio, and the personality test questions of MBTI and later Six Thinking Hats exercise, (b) to help students understand themselves concisely and to help educators understand their students, (c) to help educators communicate better with their students and to learn more about them using their personality type, (d) finally, to help students manage their skills and abilities, strengths and weaknesses, and responsibilities and desires.

MBTI has been used in different fields, to describe: teachers (Sears, Kennedy, and Kaye, 1997); nursing education (Li and Tsai, 2008); student learning styles (Kise, 2014; Hodgson, 2012; Felder and Brent, 2005) design education (Song and Agogino, 2004), among others. Moreover, it has been examined in several reviews (see Murray, 1990; Carskadon, 1979; Carlyn, 1977; Carlson, 1985).

In the analysis phase I also used the work of Jane Kise (2014) and David Hodgson (2012), because they developed an accessible version of the same MBTI theory and test in a frame that was useable among educators and students who are not from a psychological background. Moreover, they took into consideration all the issues or criticisms facing the test. For example, the psychologist Dr. David J. Pittenger published a paper in 1993 criticising MBTI and the issues facing the application of it. However, the two books adapted here have explained the appropriate application of the MBTI, and the extensive limits we can take the analysis of the test.

According to Kise and Hodgson, the personality test should not be used as sixteen boxes to categorise people by authority figures such as educators, managers, or parents. The MBTI test should be utilised as a weather forecast giving general characteristics of a personality to help facilitate better communication, development, and interaction

(Hodgson, 2012). Being able to identify the personality type of a student should not be used to decide what a life career would be for them, or to judge their future intentions.

This research does not rely on the MBTI test, the test was used to support and validate the supplementary questions and observations. Moreover, the test provided valid and credible testing in the analysis, which was important to analyse the data. As the methodology includes personal observation and personally constructed questions for the interviews, the MBTI test gave solid ground to construct my analysis and the psychological interpretations.

MBTI has four dichotomous personality dimensions and each dimension measures a specific area, as follows: Extroversion (E) vs Introversion (I); Intuition (N) vs. Sensing (S); Thinking (T) vs. Feeling (F) and Perception (P) vs. Judging (J). Aristide Saggino and Paul Kline (1996) described the four dimensions in an article on the Italian version of MBTI and specified that:

Extraversion–Introversion (EI) which measures preference for the outer world of people as opposed to the inner world of ideas; Sensing–Intuition (SN) which indicates if one relies primarily upon the process of reporting observable facts through the five senses (sensation) or upon the process of intuition, which reports meanings and/or possibilities that have been worked out beyond the reach of the conscious mind; Thinking–Feeling (TF) which measures a preference to be guided by logic rather than by needs for affiliation and warmth, and Judging–Perception (JP) which measures a preference for order and rules as opposed to a preference for flexibility and spontaneity.” (Saggino and Kline, 1996 p. 243)

These four double indicators can create sixteen personality patterns (Sears, Kennedy and Kaye, 1997). Some studies in psychology have considered MBTI and described the characteristics of each personality or type. However, in the studio environment and in the interior design field in general, I believe there is a demand to develop a specific criterion

aimed at helping educators to categorise students' creative abilities based on their personality types. This demand is linked to the fact that there are different learning styles relating to different personality types (Honey and Mumford, 1986; Kolb, 1984) and that there is no one learning style that fits all.

From this point, I used the actual questions and characteristics suggested by David Hodgson (2012). Then, I extracted and linked the attitudes and behaviours of students that would be witnessed in the studio. The following four tables summarised the personality type criteria. The first column is the exact questions of MBTI in Hodgson (2012). The Introversion and Extraversion columns are the reflections stated in the book as well as other MBTI resources. The interpretation columns were constructed by myself, linking the verbal and nonverbal actions in the studio with MBTI traits and attitudes.

Then, the supplementary questions verified the results of the test with my observations. If the results matched across the three sources of data, it would indicate a relation and reflection of the student's personality type and working preferences, responses, attitudes and behaviours. This was the core of the research. The tables 3, 4, 5, and 6 illustrate the original questions of the MBTI test and the area where it fits.

Table 2: presents the Introversion/ Extraversion preferences in relation to the interview questions.

From where do you gain your energy?				
The question	Introversion	Interpretation	Extraversion	Interpretation
1- How do you prefer to work on your project?	I tend to work best alone	Individual projects	I tend to work best in groups	Teamwork projects
2- Where do you prefer to work on your project?	Blend in	Home or personal space	Stand out	Studio or active social place
3- How do you start working on your project?	Act carefully	Take time to think, reflect and imagine to start	Act quickly	Start with sketching, drawing, CAD, modelling
4- Are you confident sharing your ideas with your peers?	I think before I speak	Usually silent or less speaking in groups	I think out loud	Group discussion is useful and inspiring
5- Do like presenting your project in front of others?	I am a good listener	Not a fan of presentations	I am a good speaker	Presentation is a natural skill

Table 3: presents the INtuitive/ Sensing preferences in relation to the interview question.

How do you take information in?				
The question	INtuitive	Interpretation	Sensing	Interpretation
1- Do you prefer thinking of the holistic picture or the details?	I look for patterns	They imagine how the project will look as a space	I look for details	They focus on the details of drawings and visuals
2- Do you prefer to solve problems and find solutions through words or practically?	I focus on how to make it different	They try to solve problems permanently so they think how to make it different	I focus on what works now	They want to solve the problem instantly and quickly
3- Do you prefer gathering lots of possibilities or facts?	I look for possibilities	Thinking of different possibilities: pre-existing or new	I look for facts	Gathering information and facts about a subject
4- Do you prefer solving problems in a conventional, safe way or in a new, risky way?	I prefer learning new things	They usually come with creative ideas and take risks	I prefer applying what I've learned	They apply what they have learned in a more conventional way
5- Do you prefer to organise your work or to work free style?	I tend to join in anywhere	Work strategically	I tend to go step-by-step	Work organically

Table 4: presents the Feeling/ Thinking preferences in relation to the interview questions.

How do you decide things?				
The question	Feeling	Interpretation	Thinking	Interpretation
1- What is your motivation for your project?	How it will affect people	Usually their design ideas focus on people's experience	Is it the right decision?	Usually their design ideas focus on logic, practicality and efficiency
2- What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?	I generally follow my heart	Sympathetic and caring decisions	I generally follow my head	Logical and rational decision
3- How do you perceive criticism? Tactful or direct?	Avoid giving or receiving criticism	In the studio, they tend not to give feedback or give soft feedback and they take feedback with sensitivity	Give and take criticism quite easily	In the studio, they explain their opinions honestly and they perceive feedback as useful and guiding
4- What is the social environment encourages you to work in groups?	Friendly people and atmospheres are important	When the group is friendly, cooperative and small	A competitive and active group is motivating	When the group is competitive and active

Table 5: presents the Perceiving/Judging preferences in relation to the interview questions.

What is your attitude in life?				
The question	Perceiving	Interpretation	Judging	Interpretation
1- What do you like more: starting or finishing tasks?	I prefer when I have started a task	They prefer starting projects and start imagining it	I preferred when I have finished a task	They prefer finishing tasks and see the final results of their hard work
2- What is more important to you: being creative or being organised?	I like to wonder how things will turn out	They aim to get out of the norm and that is what is interesting and joyful for them	I like to plan and organise	They feel relaxed when they work systematically
3- Do you prefer working following a structure or being spontaneous?	I do not like writing plan or list to follow.	They prefer to be free and think spontaneously	I like writing lists and plan to follow.	They like to make a plan from the start to the ending line.
4- What kind of environment would you like to work in? Active dynamic environment or quite serious one?	I do not mind untidy environment.	They prefer inspiring places, do not mind untidy.	I prefer tidy and neat environment.	They prefer practical places, should be tidy and neat.
5- Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?	Work at last minute to get things done	Deadlines are a stressful process that transfers the mind from imagination to reality	Work at a steady pace until the job is done	Deadlines are a stimulating process to finish the project and submit on time

The third part of the questions consisted of an activity that investigates the thinking styles of students, including their creative thinking. The activity was inspired by Edward De Bono's Six Thinking Hats Theory, which aims to enhance the creative thinking abilities of individuals (De Bono, 1985). A decade later, the Six Thinking Hats Theory has been tremendously successful and popular (De Bono, 1999; Kaufman and Sternberg, 2010). It has been proven in practise that individuals can improve their thinking abilities if they learn how to use their minds.

As discussed in the introductory chapter, Edward De Bono (2008) is the pragmatic psychologist who created the Six Thinking Hats technique. This technique focuses on maximising the effectiveness of the mind and helps groups and individuals to think differently, flexibly and divergently. His strategy is based on the theory of lateral thinking, which the Cambridge Dictionary defines as "a way of solving a problem by thinking about it in a different and original way and not using traditional or expected methods" (Cambridge University Press, 2004). He explains his understanding of lateral thinking as "cutting across the patterns" and says it is "not natural behaviour for the brain [...] it goes against the natural process of following patterns" (De Bono, 1995 p. 14). Thus, he explained that Lateral thinking is the theoretical base for creativity, as it is not a smooth cognitive process. De Bono's practical strategy of lateral thinking encourages individuals or groups to think differently using different thinking styles, in order to increase the potential for thinking creatively.

The rationale behind adopting this strategy is the belief that creativity is not a limited skill for gifted people and that anyone who has to think in order to do their job needs to develop their thinking abilities, with creativity being a fundamental pillar in today's world. This applies to the interior design student's situation, since whether they are gifted or not they have to be creative and today's education system works on this assumption (Robinson, 2011). Therefore, the theory behind the Six Thinking Hats strategy seemed closely related to this research, but the challenge was to know how to create a data

collection method on its basis.

As discussed in the literature review, the Six Thinking Hats is a cognitive developmental strategy that constitutes a set of imaginary Six Thinking Hats. Each has different colours, with each colour representing a certain thinking style. This is usually used as a technique for brainstorming, working on projects, problem solving, etc., taking into consideration that judging people or typologies of people in this way is highly contentious. The visual aspect of the Six Thinking Hats makes communicating ideas more effective and makes it easy to explain for people (De Bono, 1999). These positive characteristics of the strategy encouraged me to adopt it in the interview process. In this process, I acted as a transformer who helped students to transfer the actual thinking process into a verbal expressions, which then helped both of us to understand their cognitive processes.

Although Six Thinking Hats is more popular in the Business sector (De Bono, 1999), there is an increase application in the education sector as studies have proven the effectiveness of the strategy to solve everyday issues facing educators (Rizvi *et al.*, 2011). Charles Kivunja (2015) an educator at The University of New England, Armidale, Australia stressed in his article the importance of teaching students the thinking skills explicitly. Moreover, at the University of Malta is the location of the Edward De Bono institute, established in 1992, offers a program on product design and the development of thinking. In this course, students are taught how to sharpen their thinking skills using the Six Thinking Hats while perceiving and solving problems. The outcomes show promising success in developing lateral and creative thinking through education.

I made six thinking hats in the six colours, each with a statement of the meaning represented by the specific colour written on it. I then asked each student to organise the hats according to the thinking processes they go through in their design projects. I asked them to explain why they ordered them in this way and to describe their process verbally.

Table 7 summarises Edward De Bono's (1995) explanation for each Hat colour and what type of thinking each style represents. The statements of meanings and the colour of each hat represents an actual hat:

Table 6: presenting the meanings of the six thinking hats. Source: De Bono (1995)

The Six Thinking Hats	The meanings of each colour
White hat	The White Hat calls for information known or needed. "The facts, just the facts."
Red hat	The Red Hat signifies feelings, hunches and intuition. When using this hat you can express emotions and feelings and share fears, likes, dislikes, loves, and hates.
Black hat	The Black Hat is judgment - the devil's advocate or why something may not work. Spot the difficulties and dangers; where things might go wrong. Probably the most powerful and useful of the Hats but a problem if overused.
Yellow hat	The Yellow Hat symbolizes brightness and optimism. Under this hat you explore the positives and probe for value and benefit.
Green hat	The Green Hat focuses on creativity; the possibilities, alternatives, and new ideas. It's an opportunity to express new concepts and new perceptions.
Blue hat	The Blue Hat is used to manage the thinking process. It's the control mechanism that ensures the Six Thinking Hats® guidelines are observed.

6.5.2.2 Interview Questions for Educators

Educators in the Interior Design educational domain have a strong impact on the field, as they influence newly graduated designers. However, there are several studies focused on educators within and out of the art and design domain (Meneely, 2010; Burns, 2014). My research focused on student perspectives about creativity in interior design. Educator interviews are included as a substantial source of information and triangulation. The questions for the educator interviews were:

1. What is your qualification? From which institution you got it? When?

2. Do you have a role model who influence your career? If yes who and why?
3. When you started teaching interior design? And why you chose the academic path?
4. Have you noticed any differences between students since you started teaching and the students nowadays? What kind of differences (Positive negative)?
5. What is the theory underpinning the educational strategy adopted in this school of art?
6. What is the best strategy from your opinion in instructing studio, and why?
7. What do you think the role of studio in fostering students' creativity in the current strategy in this school of art?
8. What is your criterion to judge students creativity? In other words when you describe a student as a creative?
9. Have you ever talked to students about the meaning of creativity in their projects from their perspectives?
10. Have you noticed the differences between students' creativity or the different types of students' creativity? If yes what they are?
11. Have you noticed any common features, characters, or behaviours for each type?
12. If you have a chance to set up an undergraduate program from scratch, what courses would you require of students? What skills would be essential for future designers? (McCoy, 2011)
13. Do you think interior design education should be change somehow to cope with today's demands? If yes, what kind of changes?

14. Do you think there is an observable problem in current interior design education? If yes what is it?

15. How do you see the future of interior design education in the UK?

6.6 Data Analysis

Data analysis is a significant phase of any research (Creswell, 2014), as it is the sculpting of raw materials to turn them into a valuable piece of knowledge. Moreover, qualitative data analysis transforms the detailed, rich, and complex data into meaningful ideas, theories and knowledge (Savin- Baden and Major, 2013).

The discussion of the data analysis is divided into two sections. The first one explains the theoretical framework and the ontological perspective of how to deal with, analyse, and use the data to reach the aim of the research. The second section explains the actual steps of the analysis process undertaken, from collecting the data to framing the results and conclusion.

The theoretical framework for data analysis gives a clear sense of the aim of the results and the findings. This does not mean knowing exactly what the results and findings will be, but rather it gives a general sense of what knowledge would be pursued in relation to the research aims and objectives. There are four main approaches in Grounded Theory, they are; Classic Grounded Theory CGT, Constructive Aata Analysis, Qualitative Data Analysis, and Feminist Grounded Theory (Hernandez, 2009). The first two theories have been chosen. CGT was used for understanding the studio culture substantively, as this research investigated the participants' domain – the studio culture, along with its meanings and perceptions across three different interior design programs. I chose to adopt a substantive approach that allowed me to be open and flexible with data (Glaser and Strauss 1965), alongside the constructive theoretical approach that led to the construction of theories from the data (Charmaz, 2014). The substantive approach keeps the researcher's thinking flexible, open and imaginative in relation to the research subject, so as to enable the grounding of new theories (Glaser and Strauss, 2009). The theoretical

analysis approach was used for the investigation of a definition for creativity, as thematic structural analysis is required to do (Charmaz, 2014).

A thematic cross-sectional data analysis strategy was applied to identify themes, codes and categories across all data in all cases, in order to build a theory upon a saturation of categories of repetitive themes. The output of the research mainly consists of meaningful qualitative verbal data and excludes numerical data. The practical framework of analysing the data falls under two steps: data management and the abstraction and interpretation process.

6.6.1 Data Management

At the analysis stage, it is essential to manage the high volume of raw data by organising it into meaningful categories. There are five common stages for data management: familiarisation with data; coding or constructing the initial themes; categorising the saturated themes together; writing and grounding the theory (Corbin and Strauss 2014). In practise, to apply all these processes over all the data, I dealt with the data according to the collection method, which was by observation and interviews. Dividing the data into smaller sections simplifies the data and makes it easier to manage, organise, and analyse.

In this research, the data has been divided twice, with the first section naturally following from the two collection methods. The collected data then could be horizontally divided into four sections:

- 1- Ethnographical observation of the natural settings of the studio (notes transferred to written description).
- 2- Exploratory ethnographical observation for individual students while they were presenting their projects.
- 3- Semi-structured interviews with students (audio files transcribed into text format), then coded in tables.
- 4- Semi-structured interviews with educators (audio files transcribed into text format), then coded in tables.

Figure 7: shows the horizontal and vertical division approaches.

Ethnographical observation	Observations of individuals	Semi-structured interview (students)	Semi-structured interview (educators)
<ul style="list-style-type: none"> • Studio environment • projects and activities • Students and educators interaction 	<ul style="list-style-type: none"> • Students' actions and behaviours • Personal attitudes • Interactions and language 	<ul style="list-style-type: none"> • Supplementary questions • MBTI test • Six Thinking Hats activity 	<ul style="list-style-type: none"> • Perceptions of creativity and design process • Pedagogical practices and studio

The second dividing approach is a vertical division for each of the four sections, as shown in the figure below. Each of these has been divided depending on the themes from the data surrounding the focus of the observation and interviews.

Returning to data management, the following discussion of the five stages of data management were applied across the divisions illustrated above. The first stage was to become familiar with the data by reading it several times and getting a general idea of possible emerging themes. Re-reading the data in different orders revealed new connections and links, and presented the data from different perspectives.

In this research context, the data included observations and interviews across three institutions. Under each type of data there were two subsections. The 'observation' data constitutes two categories: general observations of the studio and observations of individual students. The 'interview' section includes both student and educator interviews. Reading and becoming familiar with the data was the first step to analysing the data carefully and thoughtfully.

The second step was coding the data under specific themes related to the research subject. Coding is a controversial stage in qualitative research analysis. It has been described as potentially damaging to the qualitative data (Bazeley, 2013). However, coding is about defining the meaning of the data, labelling segments and scrutinising

meanings of sentences (Corbin and Strauss, 2014). Charmaz who supports Constructive Grounded Theory states:

With Grounded theory coding, you move beyond concrete statements in the data to making analytic sense of stories, statements and observations. We aim to make an interpretative rendering that beings with coding and illuminates studied life. (2014 p. 111).

Thus, coding was the initial step towards transforming the raw data into a coherent and meaningful theory.

In this research context, the coding phase led to three sets of coded data: studio observation, student data, and educator data. The coding process sought terms, words or statements that revealed values, perceptions and meanings. For written texts, I chose one main verb or subject in line-by-line coding (Charmaz, 2014).

The third stage was categorising the data according to common themes and specific categories using the Word document format. I Gathered similar phrases and words under a thematic structure, reviewing, extracting and parsing the data constantly. Through this process, these themes became saturated within conceptual categories, in order to become the terms used in the analytical writing.

The fourth step was to review these conceptual categories, and the best way to do this was to follow the guidance of these questions:

- Does the thematic framework fit the data?
- Has the researcher subjectively cherry picked the data to manipulate it?
- Is there lots of neglected data that is not being used properly?
- Is there coherence between themes and sub-themes or does the data become messy?
- Has the data become fragmented?

When the data had successfully passed these questions, the themes and the sub-themes were checked. Similar themes were joined together and if there were broad themes, these were split into more specific ones. After this, a reconceptualisation of these themes served

to link them to the theoretical framework, the research aims or the body of knowledge (Charmaz, 2014; Corbin and Strauss, 2014).

The fifth step in the data management process was to summarise, synthesise and display the data.

This step is about joining all the previous steps in one thematic synthesised framework to summarise the findings. Thematic coding tables are highly recommended for organising data and displaying the links between themes, as well as to facilitate creative thinking in synthesising the data (Appendix 11). Summarising the themes across all data sets simplified the analysis procedures and discussions in the abstraction and interpretation stages. Although some texts recommended NVivo software, it could also be manually done in a Word document format, which I chose for this research. Each section of data has independent coding tables which later created multiple matrices to extract any correspondence between different themes (Bazeley, 2013; Charmaz, 2014; Flick, 2014). Finally, a summary was produced, completing the matrices framework, by reading each theme, preserving the language and terms, synthesising the data to provide the essence of the findings which constructed the grounded theory.

By creating these summarising tables, I gained a clearer vision of what the findings were, of the related literature to be discussed in the discussion section, and which theories could be generated in relation to the research aim and objectives. As a Grounded theorist, the data management phase can be seen as a jam factory, responsible for the whole process of transforming the actual fruit into jars of jam. By selecting the related data, excluding non-related data, and analysing each category in relation to the subject, I worked through a process to extract the essence of the data. In this case, the main theory generated was that each individual is in an entity with inner and outer motivations, each representing and reflecting on the other.

6.6.2 The Abstraction and Interpretation Process

In this phase, meanings and theories were extracted, and new contributions to the already existing body of knowledge were made. At this stage, the newly grounded theory is presented and the final part of the story is unveiled, depending on the conceptual categories that emerged from the tables constructed in the previous stage. There are three steps for writing and interpreting the data: theoretical sampling, saturating theoretical categories, and theorising the grounded theory.

6.6.3 Theoretical Sampling

The original definition of theoretical sampling in the Classic Grounded Theory is: “the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges (Glaser and Strauss, 1967 p.45)”. As Jenna Breckenridge (2009) explained the theoretical sampling of Charmaz’s description as “a means of focusing data collection and increasing the analytic abstraction of theory by illuminating variation and identifying gaps that require elaboration.” It is about “seeking pertinent data to develop your emerging theory. The purpose of theoretical sampling is to elaborate and refine the categories constituting your theory” (Charmaz, 2014 p. 193). In fact, there are different methodological strands for each approach.

Theoretical sampling purposely selects the sample for the research based on deductive primary research, and that does not conflict with principles of Grounded Theory (Breckenridge, 2009). The purpose of choosing the studio for observation, and the students and educators for interviews was to collect rich data about interior design pedagogy and to understand the concept of creativity within this context.

6.6.4 Saturating Theoretical Categories

In Grounded Theory, ‘saturated data’ means the accumulation of repetitive data or categories in order to generate a theory or phenomenon, and that even if a higher volume of data has been accumulated, the results will hold (Corbin and Strauss, 2014). In this

section, it means that the focus is on the theoretical patterns that developed in the theoretical sampling stage. Glaser (2014) defined it as:

... the conceptualization of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the generated Grounded theory with theoretical completeness” (Glaser, 2002 p. 191)

At this stage, the categories and content of the Grounded theory have been fully constructed and no more categories or themes are expected to develop: “categories are ‘saturated’ when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories” (Charmaz, 2014 p. 213). According to Alan Bryman (2012), in qualitative Grounded Theory theoretical saturation is particularly challenging when it comes to sampling size, as it is hard to anticipate a sample size that would deliver saturation. In this research, the collected data shows saturation under certain categories, with no new emergent categories. However, time constraints have also dictated that the sample size is limited to three institutions and this point will be discussed in the section on limitations of the study.

6.6.5 Establishing the Grounded Theory

Theorising is a core element in a Grounded Theory approach and having a good understanding of the term ‘theory’ is essential. In the social sciences, “[a] theory states relationships between abstract concepts and may aim for either explanation or understanding” (Thornberg and Charmaz, 2014 p. 41). This definition shows that theories explain phenomena, describe situations, help people to be more knowledgeable and gain deeper understanding.

There is uncertainty about defining theory in Grounded Theory, and the reality of constructing Grounded theories. This research takes the constructivist Grounded Theory approach, which has been described as one that “theorizes the interpretive work that research participants do, but also acknowledges that the resulting theory is an interpretation. The theory depends on the researcher’s view; it does not and cannot stand outside of it” (Charmaz, 2014 p. 239). In fact, this epistemological theoretical framework

that underpins the whole research means that individuals construct the meanings of the world they live in. The Grounded theory approach aims to collect all these individually constructed meanings and develop an original theory. Grounded theorists need to reflect on their own interpretations. Relativism is a theory of reality, insofar as meanings, perceptions and values are strongly and relatively linked to actual settings constructed by the researcher. Subjectivity of data analysis is unavoidable, however, as long as it falls within the theoretical and logical framework and explanations, it is valid. There is reflexivity of all the processes in the data analysis, in order that the research theory be constructed. Validating the data by considering participants' views is a critical step in controlling the subjective element.

6.7 Research Design

The research design draws the full picture of how the research has been carried out, from the first step of thinking and planning to the last phase of analysing and documenting. Theoretically, the following figure presented the approaches and theories used in each phase. The practical aspect (field work) will demonstrate the steps followed in conducting the research, and the discussion falls under two focal phases: data collection and data analysis. Figure 8 visualises the methodological process of conducting the research. The structure shows the holistic process and phases from the beginning to the end.

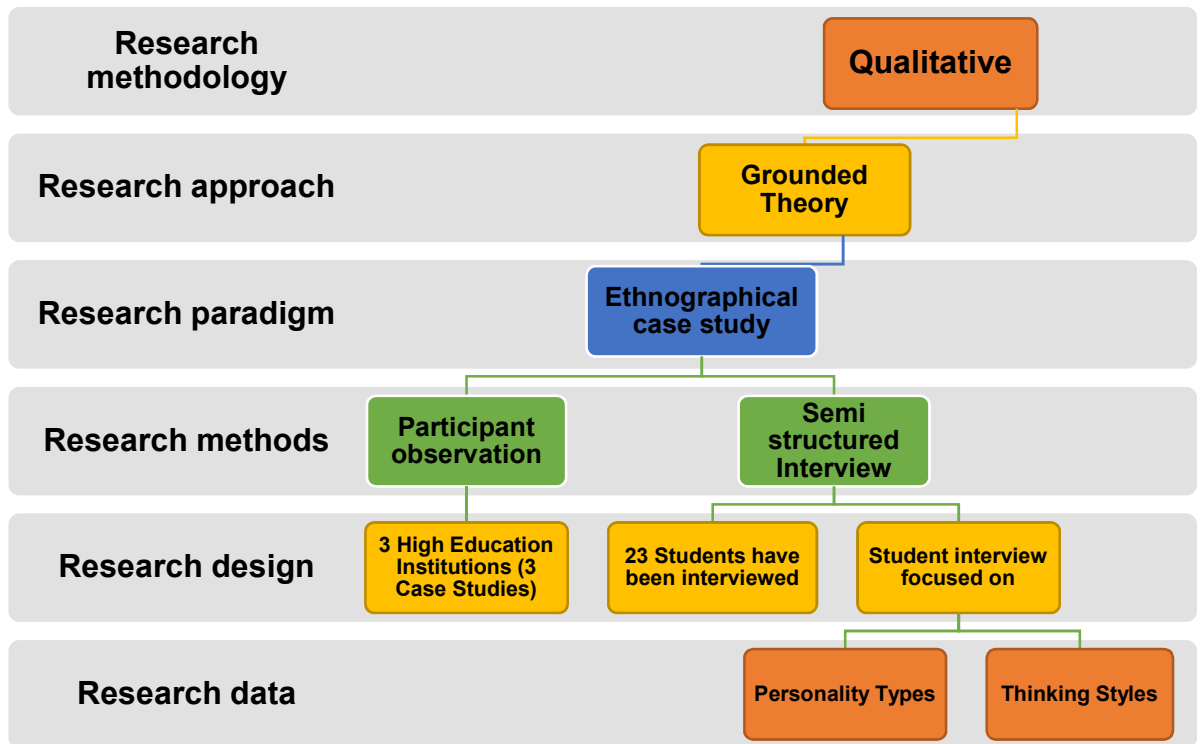


Figure 8: Diagram of main theories and approaches chosen for the methodology.

The Practical Research Design has two main phases, which are data collection and data analysis. As shown in figure 8, there are several steps in each phase.

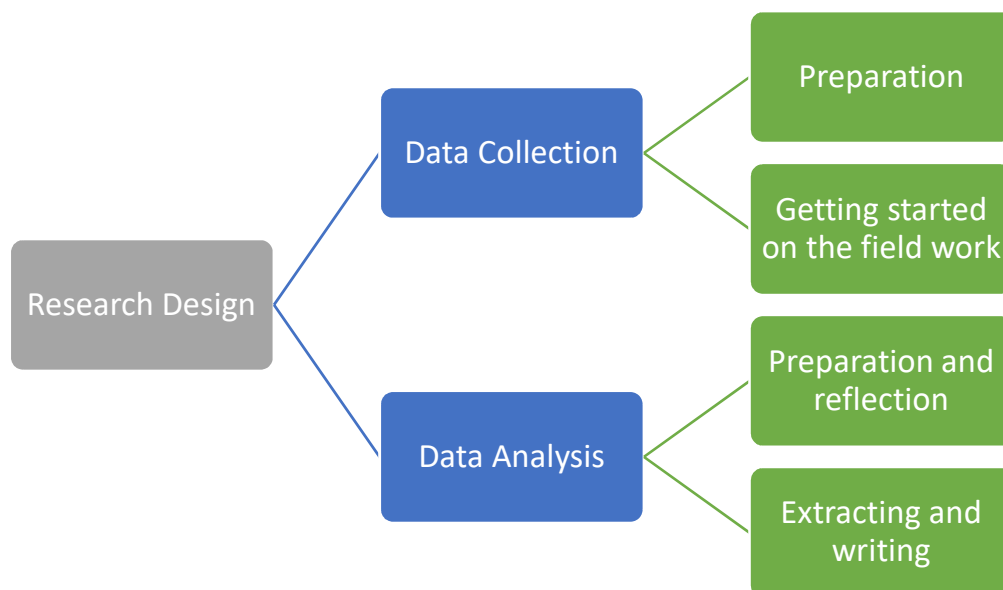


Figure 9 A diagram showing the main two phases of the research fieldwork.

6.7.1 Data collection

The data collection phase consisted of two stages; the preparation and piloting was the first stage, and the field work was the second stage. Each stage will be discussed as follows:

6.7.1.1 Preparation

There were five steps for preparation before starting the fieldwork. These were:

- 1- Recruitment of universities that fit the sampling criteria. I e-mailed all Higher Education institutions that taught interior design as a Bachelor's degree and got acceptance from three institutions. As discussed in the sampling section, three interior design schools were targeted as it was the minimum number for triangulation, to realistically accomplish the research requirements.
- 2- I visited the institutions that agreed to participate in my research. I met the tutors face to face to discuss the research phases and what they expected of me, and I checked the natural settings of the studios. It was important to build a sense of trust and understanding with the tutors, and to give them a chance to ask questions to further understand what I intended to do, in addition to giving the information sheet. The significance of developing this trust afforded a greater chance of access to data that would be beneficial to the research.
- 3- I created a schedule of the academic term for each institution, depending on the timeline and dates of the chosen project for the research. Each institution was considered to be one case study and I intended to investigate one project at each institution. In all three cases, one interior design project lasted one academic term, from the first step to the last. This meant that in order to meet all three targets, three academic terms were needed. The first case was during the first academic term of 2013/2014; the second case was during the second academic term of 2013/2014 and the third case was during the first academic term of 2014/ 2015. This is considered a long period of time for fieldwork, however, it was the minimum logical number of cases for triangulation. This point will be discussed further in the

section on limitations.

- 4- Preliminary observation at Anglia Ruskin University (ARU) took place in order to improve my observation skills. It was a part of the pilot process. It helped me to clarify the huge amount of data available and stay focused on the research question. I created a note-taking template that helped me to stay focused and to note down the necessary data. As attached in the appendix, the observation templates are divided.
- 5- Arranged train bookings, hotel reservations and audio tools as a last step of preparation to start the fieldwork. This was a crucial step that could dramatically influence the research.
- 6- The pilot process, the research methods, and the research design should be tested and verified scientifically before the actual field work begins (Creswell, 2014). For this research, I tested my methods in two institutions; a college of art in London (the name is anonymised for ethical reasons), and a school of art in England. After getting the e-mail approval from the course directors, I conducted three interviews and two days of observations at each institution. The piloting process aimed to ensure the validity of the MBTI test in relation to the supplementary questions and the Six Thinking Hats activity, and the interview responses in relation to the observation. The first positive thing was the timing, as three days of observations were sufficient to capture the necessary data and dynamics needed for this research. The interview responses showed homogeneous and promising data consisting of the three sections. The data revealed strong reflection between the implicit personal thoughts and attitudes in the outer behaviours, verbal communication, and actions.

6.7.1.2 Starting the Field Work

As discussed, the field work constituted six steps and the same process was applied in the three institutions that participated in the research. Moreover, the six steps were intended to be conducted in one academic semester. Those six steps were: introductory observation, active observation, documenting the observations, individual observation,

interviewing and data documentation.

1- Introductory observation: on the first day of the observation, there was a transition from the unknown to the known. As I had no idea of the place, educators, students, projects or any other information it was important to become familiar with the situation. The course leader (educator) introduced me to the students and other educators, as a first step towards creating a direct relationship between the students and myself.

2- Active observation: usually, I would revisit the institution on three more occasions during the academic semester, mainly to attend presentation days, a normal day in the middle of the semester, and the final critique. On a normal studio day, I observed the general setting of the studio and the relationship between students, educators and their surroundings. At this step, the focus was on documenting the dynamic of the interior design studio culture, which revealed the studio as a culture and as a place.

3- Documenting the observations: taking notes on my main observations was an important step, since small details could matter later on. Writing down these small details completed the puzzle of the studio. Later on, when the observation of the three institutions had been completed, the differences and similarities were compared. Then, I was able to see repetitive themes and phases which helped me to make saturated statements with regard to similarities.

4- Individual observation: individual observation of students was a verification process that supported the data from the interviews. This also helped me to be familiar with students' personalities through their attitudes and behaviours. On presentation days, the focus was on observing students' behaviour during their mid-term and final presentations and their responses to educators' feedback.

5- Interviewing: I conducted interviews of students in the middle of the term (after the mid-term presentations). The rationale behind conducting interviews at this time was to give the students a chance to settle down and become more familiar with the process, avoiding the early weeks when there might be confusion, and the final weeks when they are under additional pressure. Additionally, by this time students would

have an initial idea of their working structure or thinking process. Educators' interviews could be conducted any time as it would not make a difference; the most important thing was choosing a time convenient for them.

- 6- Data documentation: in this research, there were two actions: transcribing the interviews from audio to a text-based format, and transforming the observation notes into lengthy descriptive observations, then preparing all documents and organising them for the analysis phase. This step could be considered as the in-between phase, as it was the last phase of data collection and the first phase of data analysis.

6.7.2 Data analysis

As this research adopts qualitative Grounded Theory, the code comes directly from the data. This is called "inductive coding" (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2014). The research intended to fulfil two primary aims: understanding the interior design studio, and defining creativity in relation to other variables in interior design pedagogy. Thus, there was a different analysis approach followed for each aim. Although the coding and analysing steps in Grounded Theory were considered controversial, currently there are much clear explanations of the different types of coding and analysis (Gibbs, 2002; Miles, 1994; Bazeley, 2013).

6.7.2.1 Preparation and Reflection

- 1) Familiarisation: becoming familiar with the data of the three institutions; studio observations, individual observations of students, student interviews, and educator interviews.
- 2) Substantive thematic coding: after reading the observation material, alongside the interviews and findings themes that repeat across the data and answer the research question. From the data of the studio, the data has been coded according to the main phases of the pedagogical process applied in the studio. These thematic codes have been repeated across the three institutions, and the data accumulated around these themes.
- 3) Theoretical coding: the data related to creativity was coded theoretically, depending on the concepts from the definitions, then codes have been categorised

under themes. The analysis of MBTI Personality tests for each student was analysed following the procedures from David Hogson book, and the six thinking hats activity were ordered for each student. Regarding the definition of creativity, a second phase of axial coding was completed. Axial coding in Grounded Theory is “the process of relating codes (categories and concepts) to each other, via a combination of inductive and deductive thinking” (Charmaz, 2014 p. 62). As codes and categories of creativity definitions coded in relation to personality types and thinking styles emerged from the first coding phase. To analyse the data properly, I created tables that simplify the process of linking, bridging and finding relationships between themes and variables. All student and educator interviews were organised into tables to find out what themes the data became saturated under, or to find the links between perceptions, thoughts and ideas.

- 4) Cross-case analysis: Analysing the studio observations took another form after coding and categorising the phases of the three projects. The cross-case analysis means to carefully read the same phase or step across the three institutions in order to reveal any similarities or differences across those institutions. The findings should reveal any significant pattern in the pedagogical process of the studio, which could be used to develop the practice. For example, project briefs were given to students at the beginning of a project in all three institutions, however the content and guidance in the briefs were different. These kinds of differences were analysed in relation to the student perceptions of these briefs, and by comparing the results of student interpretation of the briefs.
- 5) Constant comparative analysis: students were the focal point of the research. Constant comparison between the variables surrounding students took two phases; the first one compared the students’ definitions of creativity in relation to personality type, thinking style, and educator definitions of creativity to reveal any correspondences which could represent similarities, differences, contradictions, influences and so on. This contributed to answering the research questions and enhancing the understanding of the context. This step was significant in the

analysis phase, as it generated the grounded theory from the data that made up the theoretical foundation of the research.

The second phase analysed individual students by constant comparison of the five variables; students MBTI personality type, supplementary questions (verification of MBTI test), thinking style, definition of creativity, and individual observation. This step rendered a direct, simple and logical theoretical framework. By completing this analytical phase, the extraction and writing-up phase could begin.

6.7.2.2 Extracting and Writing

The first step in discussing the findings (categories and themes), was in relation to the literature by synthesising my findings to the existing body of knowledge. The substantive domains related to this research are interior design pedagogy, the interior design studio, and creativity. By answering the research questions, the data was examined in relation to the views from these three domains in order to fill the gap within the interior design field, thus directly addressing the research aim.

The second step was grounding the theory of creativity saturated from the student and educator definitions of creativity. This theory is the theoretical foundation for the contribution to knowledge in this research. As each coded category represents a theme in the underlying theory, these concepts then construct the theoretical framework resulting from the study. Finally, I extracted the conclusion, my contribution to knowledge, and recommendations.

6.8 Ethical Considerations

Social science research has embraced ethical considerations, in order to prevent harm coming to anyone involved in research, either researchers or participants (Laine, 2000; Denzin and Lincoln, 2011). This section is concerned with: consent, confidentiality and verification. The second section covers the value of trustworthiness and the obligation to ensure truth value, applicability, consistency and neutrality in order to ensure trustworthiness. The third section explains the triangulation process from an ethical perspective in relation to credibility value.

6.8.1 The Ethical Values Discussion

Consent, according to the contemporary standard of social research (Charmaz, 2014), means that members of society have the absolute right to choose what they want to do and what they do not want to do (De Laine, 2000). There was a procedure to ensure personal agreement and full acceptance to participate in the research (Denzin and Lincoln, 2011). Educators and students were officially informed via information sheets that they were under no obligation to participate and that they had the right to withdraw from the research at any time. They were informed of their rights and the process for the research before any interviews or observations were conducted. Ensuring the consent of participants was necessary to avoid pressurising individuals. Moreover, it was essential to prove that all participants were aware of their rights, the research context, what they were expected to do, data protection compliance, and confidentiality.

Confidentiality is one of the most significant tools for protecting individual privacy (Glaser, 2002). Keeping names anonymous helped to protect the confidentiality of educators, students, and institutions (De Laine, 2000; Russell and Gregory, 2003). Moreover, the data was treated with consideration, to ensure that no one had access to it apart from my supervisors and myself, and that it was saved on a password protected personal computer. In the analysis phase and the discussion section, each participant was given a reference code to ensure confidentiality at all stages of the process (Russell and Gregory, 2003; Seale, 1999).

The validity of qualitative studies was a contentious issue that caused wide rejection of it as scientific research in the 1980s, therefore developing verification strategies and assessing the trustworthiness of qualitative research was essential (Morse *et al.*, 2002).

Verification strategies maintain the power of the researcher over the research data by providing supportive self-correcting data (Morse *et al.*, 2002; Charmaz, 2014). The verification step is an ethical process that can shift the power of the researcher while collecting, interpreting and representing data (Laine, 2000). In order to address this ethical issue, the interviews give the necessary verification to consider educators' and students'

perspectives.

Several ethical issues appeared in the process of collecting the data and as a researcher I had to deal with these situations with a high degree of sensitivity and confidentiality.

Researchers should be ready for the unexpected, by responding wisely, ethically and morally (Bazeley, 2013). For example, during the observation procedure, unintentional access to confidential or sensitive information may occur and it is thus crucial to protect this information as this will be significant to the people involved:

[t]he new “activism” calls for social relationships that are intimate and close and requires researchers to demonstrate more authenticity, sensitivity, maturity and integrity than in previous moments of social science (Laine, 2000 p. 2).

6.8.2 Trustworthiness of the Research

The assessment of trustworthiness has different meanings for qualitative and quantitative research, following different models and criteria. This difference is due to the different purposes and traditions of qualitative and quantitative strategies (Krefting, 1991 p. 219). In quantitative research, the value of trustworthiness is assessed by the validity of the numbers and facts, which are indicated by the ability to generalise theories or findings (Agar, 1986). Whereas in qualitative research, generalisability does not carry the same weight (Payton, 1979) and other terms should be considered, for example credibility, accuracy of representation and the authority of writers (Agar, 1986). Indeed, Leininger (1985) argues that the issue with all these ethical considerations is not the conceptual framework underpinning the assessment, but the definitions of these concepts. Therefore, different models and strategies have been formed to assess the trustworthiness of qualitative research, depending on the approach that has been adopted. Since each method of qualitative research has to adopt different approaches to achieve their specific purposes (Flick, 2014), the trustworthiness values and concepts are different from one approach to another (Krefting, 1991 p. 219).

Guba (1981) developed a model to assess trustworthiness in both quantitative and

qualitative research. The concepts of this model are: **truth value, applicability, consistency and neutrality**. These concepts or values should be defined differently depending on whether the quantitative or the qualitative perspective is dominant.

There are different strategies to assess these values in research based on the type and quality of the research. "These strategies are important to researchers in designing ways of increasing the rigor of their qualitative studies and also for readers to use as a means of assessing the value of the findings of qualitative research" (Krefting, 1991 p. 215). Despite there being several models for evaluating the trustworthiness of qualitative research, Guba's model has been the one conceptually developed and most widely adopted by qualitative researchers (Krefting, 1991 p. 219). Guba and Lincoln (1982) have reflected their concerns about trustworthiness by proposing four metrics: truth value, applicability, consistency and neutrality.

Truth value is a philosophical principle concerning the meanings and characteristics of the world in order to make judgments about objects as true or false (Kant, 1987). The truth value generally means abstract objects and entity that crucial to identify the identities of objects. In social science, truth value cannot be either true or false, as it deals with human nature that cannot be restricted to these two options of being true or false (Hughes, 1990). As qualitative research following Grounded Theory, this study does not claim to be generalisable in and of itself, however the applicability discussion presented promising potential. In other words, in this research the consistency of findings led to new saturated outcomes, which represents a high value of truth that can be generalised.

Applicability was a fundamental factor in this research, despite the fact that clarification of the context was the most important aim. I studied interior design at Bachelor's degree level, then worked as a teaching assistant in an interior design department for one year. I have dedicated my research to achieving the goal of developing pedagogical practice in interior design, and to help myself and my colleagues to teach students using advanced approaches. Teaching students with a clear vision of how to improve their education holistically, and to use all their talents and abilities fully was the target of this research. My

goal was to find ways to improve their creative abilities and criticality, and to reach an outstanding level in interior design pedagogy. As both a student and an educator in an interior design department, I believe that both perspectives are important when constructing an exceptional education experience.

Neutrality may seem like interfering with the subjectivity meaning in this research, however despite the fact that there is a personal opinion in this research, neutrality in documenting, transferring, analysing and stating the findings related to honest neutrality. Thus, neutrality in documentation and interpretation is a must in all research, which is different from neutrality in the research methodology and research approach.

Credibility is defined as the truth value in qualitative research. It is essential to ensure the reliability of the data gathered, especially as in qualitative research there is a high subjective sense of the researcher. Reflexivity and triangulation are the conceptual values considered to increase the credibility of the research. Reflexivity refers to assessment of the influence of the investigator's own background, perceptions and interests, in the qualitative research process (Ruby, 1980).

6.8.3 Triangulation

“Triangulation is a powerful strategy for enhancing the quality of the research, particularly credibility” (Krefting 1991: 219). This strategy of providing a number of different layers of data also minimizes distortion from a single data source or from a biased researcher. The observations, educators’ interviews and students’ interviews are the three triangulated perspectives that increase the credibility and the truth value in this research. Credibility is a fundamental aspect to ensure in this research, as the developed theory and application will be used in the pedagogical practice of interior design field. Thus, ensuring the credibility and applicability of the data was a must to achieve my research aim.

Section two: The Discussion of Analysis and Findings

Chapter 7: An analysis of the Ethnographical Observation in the studio

Chapter 8: Interior Design Studio: A place, a paradigm, or a culture? A critical reflection

Chapter 9: The analysis of the students' definitions of creativity from their interviews

Chapter 10: An analysis of individual students' personalities from five different perspectives

Chapter 11: Interior design pedagogical themes Or Thematic Discussion of Interior Design pedagogy

Section two: The Discussion of Analysis and Findings

This section demonstrates the data analysis of observations and interviews. It includes five chapters, each chapter considers specific data and analyses it to extract certain information to meet the research aims and objectives. Chapter 7 analyses the observations in the studios and provides a descriptive narrative of interior design studios. Chapter 8 provides critical discussion that reflects on the data in Chapter 7, extracting the essence of it. Chapter 9 provides a consistent comparative analyse of the students' definitions of creativity. In particular, it will answer the research question: *What are the conceptual understandings of creativity and how do students define creativity?* Chapter 10 provides brief discussion of individual personality analysis in student interviews, and it refers individually to the full detailed analysis in the appendices. Chapter 11 provides the critical reflection and themes which emerged from the interview data. It also discusses in an informative way that answers the research questions, which are essential to build the contribution to knowledge of this research.

Chapter 7: Analysing Ethnographical Observation

7.1 Introduction

This section will analyse the observations in the studio across the three cases. The collected data (in document format for observation notes and interviews scripts) of each institution has been utilised to answer the research question: how can interior design educators develop pedagogical practice and theory to foster students' creativity? As discussed in the methodology chapter, ethnographic observation and semi-structured interviews are the two methods used to collect data from three higher education institutions that teach interior design programs across the UK.

One of the targets of this research is to enrich the literature on interior design education by providing narratives of educational programs which is the first step to develop the pedagogical situation. This section provides a description of the current practices in the interior design studio. As stated before, this detailed documentation step is essential for understanding the present practice of interior design education, encouraging professionals in the field to analyse and critique any issues and drive the development of the domain.

7.2 Case Study 1 observation (Institution One)

The first institution is one of the leading School of Arts in 1950s, and the observation documented the studio settings of the last cohort of the interior design programme. I conducted four days of observation over a three-month academic term. It was important to document the demographical data, the built environment, the project brief and the process of designing in the studio before the program closed down.

7.2.1 Demographical Data

The students who participated in the observation were final year graduate students from the interior design programme in this institution. There were 18 students (5 males and 13 females). There were three educators for this course: the course coordinator, who was the person responsible for constructing the program and setting the mission and vision of the course; the course tutor who was mainly responsible for digital assistance and software

guiding; and the academic writing tutor who helped students in writing their graduate dissertations and any other required assignments.

7.2.2 The Built Environment

The interior design programme is located in a separate building near the main building and consists of three levels (ground, first, second), with two studios on the first and second floors. The computer lab is located on the ground floor and it is the place where students draw their project plans using software like CAD (Computer Aided Digitals), Photoshop, rivet, etc. There are toilets and a small kitchen to provide convenience for all users of the building.

My observations shows the impact of having an Interior Design program located in a separate building from the other art and design programmes. The positive of this isolation is excluding any extra factors influencing the students' attitude and characters.

Individually, personal differences are clear through interpreting the different behaviours and attitudes, as some students seemed relaxed and satisfied and others were bored and frustrated (the students expressed this frankly in their interviews).

Socially, students have built close and friendly relationships together over the years. The observation shows how the studio became a place, time, and opportunity for students to socialise. They talked about different aspects of life; chatting about their weekend, asked for help when they were struggling, discussed their challenges and opportunities, ask others about their designs.

My interpretation suggests there was a low sense of competition and highly friendly atmosphere, which was supported by the previous discussion in section 4. According to Runco (2014), competition indicates motivation and productivity, which are reflected in stress and the tendency to be defensive.

7.2.3 The Project Brief

The tutor handed in all students' 14-page booklet of the tasks required from the beginning to the end of the semester. As shown in the image below, the project aimed to open the students' minds to start thinking personally of their near future career through the project. The project concept was inspired by the sculptural work 'Declaring, Defining, Dividing Space' by Richard Serra, and it was divided into three parts. First, the task was to define space (session one) by making a cube of 8m³ using paper and strings in the studio space collaboratively, see image 10. This activity was a learning-by-doing experience, as it developed the students' sense of space and helped them to imagine the actual size of the space. After that, students were required to research and decide what area, direction or value they would like to specialise in for the future. The second part was declaring space (session two) by deciding what type of interior they wanted to make. The third part was dividing space (session three onwards), which was the final part of brief. Students had to deliver a Pecha Kucha presentation to the class to illustrate what they did in their first three sessions (six weeks).

Interestingly, on the first page of the booklet, these two statements were stated clearly: "Research + Professional Practice + Creativity = Opportunities for your Future Career." and "Think tactically, laterally and above all **CREATIVELY** to impress them". By the use of the terms "Creativity" and to think "Creatively", it was clear what the students should be aiming for, and this was discussed frankly in the studio time.

MODULE ASSESSMENT BRIEF	
Programme Title: BA (Hons) Interior Design	Level: 6
Module Title: Personal Professional Practice 3	
Brief Title: Small spaces, Big ideas (PART 1)	
	Weighting of Brief within Module: 100%

Context;

In this module you will synthesise your professional and contextual research, skills and creative intentions with your understanding of professional practice and career ambitions

This is extracted from the Module Specification and in other words it means:
Research + Professional Practice + Creativity = Opportunities for your Future Career.

This module's aim is to help you refine your personal brand and graphic presentation skills, but also simultaneously to help you focus more tactically on the career pathway that you want to follow. To find out more about exactly who are the leading designers in Fashion Retail, Hotels, Museums and even specialists in billionaires apartments in London, New York, Sidney and Tokyo, that you'd like to work with. Following on from last year, the visiting professionals lecture series will again be organised to support your learning.

Q/ So what do you really need to do to guarantee that you will attract the attention of the HR or recruitment manager in the company you'd like to work for?

A/ Think tactically, laterally and above all **CREATIVELY** to impress them.

Brief or Tasks

Process is more important than outcome. When the outcome drives the process we will only ever go where we've already been. If the process drives the outcome we may not know where we are going, but we will know we want to be there.

Extracted from 'Incomplete Manifesto for Growth', by Bruce Mau 1998

Some of you may not know what you want to do when you graduate, you may not even want to be a conventional interior designer. This brief will help you in making this decision.

The brief is broken into 3 parts; the design process in Parts 1 & 2, have been inverted to help make this decision making period more cerebrally challenging, over the next few months.

NB. Additional one-to-one progress tutorials will be provided as 'enhancement' to your undergraduate experience, to help you focus and improve in readiness for semester 2.

PART 1: Defining space (session 1)

Making a cube

- You will be divided into 2 x teams of 6, and 1 x team of 7
- You then have to measure and construct approx. an 8m³ volume in the studio using materials provided, connected from floor to the suspension wires (assume wires are approx. 2m high)
- The vertical and horizontal planes, entrance/exit design of the cube is up to you.
- You must document the construction process (sketching, photographs etc.) legibly and tidily in your Reflective Journal or Sketchbook
- All the time thinking about what it is you want to do in the future, when you graduate

Figure 10 A figure shows the final project brief in institution one.

7.2.4 Studio Experience: Introduction to the Project Brief

Students arrived on time, listened carefully to the introductory session and then divided into two teams of nine students to build the cube. They then documented it by capturing photographs, sketching or describing the process. The educators explained the brief clearly and openly, in a group discussion in the studio with informality to encourage students to ask questions. The educators remained to answer any questions. The students were interested and it was a challenging experience for them.

By the end of this session, they were satisfied

with the final look of it and were shocked by the actual size of the cube. They start testing and using the space and placing furniture inside it to understand cognitively the relationship between the body dimensions and space (geometric). They understood the challenges as they started questioning and discussing different issues of designing such a small space to make it useful and functional.

Figure 11: A photo showing the cube model built by students in the studio in institution one.



7.2.5 Studio Experience: Pecha Kucha presentation day

The students presented their projects using the Pecha Kucha Presentation strategy (presenting 20 slides with each slide taking 20 seconds). This strategy aims to improve presentation skills within a short period of time. The digital assistant tutor had prepared the presentations by downloading them before the presentation session, which was an essential preparatory step to ensure the functionality of all the presentations to avoid any disturbance. Also, it was good time management to have clear sessions and short breaks between the three groups.

As an assessment strategy for the presentation, the educators divided the students into three groups to present their projects. The first group were the most anxious students who

had 'glossophobia,' fear of public speaking. The aim of dividing the students was to minimise the stress on students in each group. The course director and the course tutor observed the students' presentations, asked some questions and gave them constructive feedback for developing their projects, including advice or suggestions. Interestingly, there were facial expressions and eye communication between students, which seemed like a coded language that had developed between them over time.

7.2.6 Studio Experience: normal studio day

The normal studio day mainly consisted of a lecture by the course coordinator for the students about 'pioneers in design and architecture.' The students arrived on time and sat down in friendly groups. The lecture started by presenting famous projects, analysing the concepts behind them and the process from the first brief to the last phase of the actual building. He used influential words in describing these projects and the designers' ways of thinking and processing, such as 'thinking out of the box' and 'taking risks' to be creative. He emphasised the conceptualisation stage, sketching and drawing, searching and understanding the project's context and updating the latest innovations in the field. When the lecture was over around midday, some students were tired and hungry so they went to have their lunch and take a smoke break. Other students went immediately to work in the lab on CAD. It was the busiest place as they were talking, laughing and socialising while working on their projects, as well as asking each other how to solve a specific issue in drawing on CAD. Others went to the quiet studio to work on their projects alone or going to tutors to ask them specific questions and seeking help or guidance in overcoming a specific issue. Several students preferred to work at home, so they left. Only three students were working on their computers in the main studio, near the tutors' room.

Regarding the different choices of work place, the results show that students make their own choices depending on their personality. For example, *Extraversion Perceiving* personalities prefer to stay in the studio; they also stated that they cannot focus on their projects at home as they would be easily distracted by watching TV, preparing food, sleeping or any other life activity. On the other hand, *Introversion Judging* students prefer

to work in quiet areas on their own, but in a working atmosphere where they can focus, imagine or daydream without distractions until they have accomplished the task. Whereas *Introversions Perceiving* students prefer to work at home where they can imagine and daydream spontaneously until they are inspired.

7.2.7 Studio Experience: final crit

On the final presentation day, called 'the crit day', the students present their final cube projects in any format they prefer. Students have been divided alphabetically into three groups of six students. Each student had fifteen minutes to present and ten minutes for discussions and feedback. The first group's session lasted from 09:00 to 11:30, followed by a thirty minute break. The second group started at 12:00 until 14:30, then the third group from 15:00 until 17:30.

Students arrived early for the presentations and had friendly chats about their emotions and experiences for the last project. They arrived around 09:00 to organise and prepare themselves and their projects for the presentation. They were describing their mixed feelings; they were nervous about presenting their final projects and happy at the same time as they are graduating. They were excited to see the final results of their full term hard work and most interestingly they were proud and surprised by having good ideas at the last minute and wished they could get extra time to apply or present them properly.

When the tutors arrived, they arranged the room with three chairs in front of the main screen (jury committee seats). Suddenly, students seemed very tense and stressed (they were sitting with straight backs and locked legs and arms). They presented one at a time (and I started the personal observations for students in the special forms). The main observation about the presentations was that there was a pattern in the structure: the conceptual framework, the main idea, where it comes from, design details, visuals and materials chosen. Students seemed calm and relaxed after presenting their projects (stretched bodies and loose movements). Although it seemed like a logical, normal and expected observation, it is worth deeper consideration as it is important to understand the reasons behind this pressure and whether it is a healthy, normal feeling to that extent. It is

essential to understand the level of pressure student's deal with, as some personalities cannot cope well with this level of pressure.

7.3 Case Study 2 Observation (Institution 2)

The second institution is a prestigious school of art in Scotland, and the interior design programme is one among thirteen other programs taught at Bachelor's level. The observation focused on the interior design program, although it captured interdisciplinary interactions between students from different courses. Even some projects briefs designed to encourage students from different disciplines to cooperate and work together on one project. Educators emphasised that this type of projects will open students' minds and let them expose into different perspectives and different set of values across disciplines.

7.3.1 Demographical Data

I observed a second-year studio as the natural settings. The students' schedule was one day per week from 10:00 to 16:00. The cohort were 18 students (6 males and 12 females).

Four tutors worked interchangeably with all students across the three years alongside two technical assistances who helped with all CAD or digital issues (six educators in total).

Each week, students would have one tutor of the four, which gave the students the flexibility to communicate, interact and be influenced by different perspectives. This developed the learning experience by introducing the students to a variety of perceptions, teaching strategies and different values to consider a variety of approaches in design.

7.3.2 The Built Environment

This historic institution is located in the city centre of a large, vibrant city in Scotland. The new building is an open



Figure 12 a photo of students working in the studio, individually and groups in the institution two.

plan across all departments and facilities, aiming to link all disciplines together. The developers stated that this was the latest trend in designing an educational environment to encourage students to be 'creative'.

The interior design department is located on the third floor and mezzanine wing in a brand new, modern building, with several other departments in the same building. In the interior design space, there is a tutors' area and students' area with Mac computers, drawing tables and chairs, lockers, meeting table, sofas in the corners, a toilet and a small kitchenette. The mezzanine area accommodates 12 computers and four sofas and the larger space area that accommodates more than 20 computers. In relation to my research, I observed some students prefer the close, cosy areas in the mezzanine to work in. From my observations, there is a specific group who, immediately after a discussion session with tutors, go to the mezzanine to work on their computers (each of them sits at the same PC every time). This group share the same preference of working in the same place, individually and quietly which matches their personality type preferences.

The area is spacious, with white large walls and large slant windows that show the sky directly. The huge open plan created a loud echo in the building, which can be noisy and raucous. The mezzanine floor is more secluded and a little quieter with plain white walls, high roof, large glass walls and windows, and huge open plan spaces. There are movable tables and chairs, Mac computers available for students to use, books a variety of resources available on the studio shelves, and presentation equipment.

7.3.3 The Project Brief

The brief was two pages explaining the project, which was to redesign the interior of a small apartment in a historic building to fit a new design office (two designers will be sharing the office). As shown in the figure 11, the designers were newly establishing their careers, so they wanted a quality design to represent their brand to the market. At the same time, they want it to be on budget, as they are just starting out. They have a list of spaces and facilities required for the design (two offices, meeting room, toilet and kitchenette, computers, projector and good Wi-Fi). The design is also required to be

transferrable, as the design office is only rented for two years and when they move they do not want to spend additional costs on refurbishing the new space. According to the course director, all these challenges in the project are intended to foster creative thinking in designers, so they can think creatively and solve any problems they would face in real life.

Project brief: Session 2013/14 BA(Hons) Interior Design

level	2
term	2
project title	Small Office
project duration	4 weeks

Brief

Two multi-disciplinary designers have started a business. After working nomadically for a year, they have elected to rent business premises. The lease is only for 2 years and the budget is not extravagant. Should they be able grow and move to larger premises after the lease is up, they would like the flexibility to be able to take some elements of the design with them.

Project aims and considerations

- Reception area which incorporates seated waiting area for 2 people
- Generous desk space for each of the two partners
- Desk space for 1 - 2 freelancers to occupy with a laptop
- Meeting room to accommodate 4 people, which has both visual privacy and acoustic properties
- A unisex WC which is DDA compliant
- Kitchenette which incorporates sink, microwave, fridge, kettle, toaster and storage for utensils and crockery. There must also be adequate space to allow for 2 people to use the space at same time.
- Incorporate materiality, fixtures and fitting specification as well as any bespoke design elements.

Expected outputs

- Sketch book with exploration of ideas & layouts
- Plans and sections
- Rendered views of the proposal
- Two details drawn at 1:5
- Representation of material palette & specification of any fixtures/ lighting/ flooring etc
- Demonstration of consideration of building regulations and functionality of the space for the users

Time table	
project introduction	10am - Monday 17th February
pickup	2pm - Wednesday 19th February
interim - peer review	11am - Friday 21st February
Interim review	10am - Thursday 6th March
project end	Friday 18th April

Note:
Siempre project
1 week Monday 24th - Friday 28th Feb

Figure 13 A figure showing the project brief in institution two.

7.3.4 Studio Experience: introduction to the projects brief

All students attended the project introductory session and followed it up with lots of questions and discussions. A group of students thought it would be helpful to make a visual sizing of the space in the studio, as it would help them to visualise the space in their imagination. They were encouraged in this by the tutor so they immediately used adhesive tape to mark the dimensions on the floor. Other students immediately went to start searching on the internet; others left the studio.

7.3.5 Studio experience: Normal studio day

Students varied in their timing, some came very early (around 8 am) to work in the studio until everybody gathered at 10 am and another group of students arrived before the studio time chatting with his or her peers, having a look at any new work in the studios, and some students arrived just on time for assembly and left immediately after.

At 10 am, the tutors called everyone together to give the day's instructions, every week there was a lecture about a specific aspect, a visitor from the industry or someone with experience in relation to the student projects.

Some students asked lots of questions and they were the same students who asked a lot in each studio session. They also had a good relationship with students from the third year, some days they gathered and worked in the studio together. Generally, there was an interrelationship between interior design students across the three levels (junior, senior, graduate students) and across all disciplines in the school.

7.3.6 Studio Experience: Observation of Charrette project

My observation in institution two started with the Charrette for three days, in which students had to work in groups in the studio on the same project. This educational strategy developed students' skills and abilities in teamwork, brainstorming, collaboration and working collectively in a short time. To briefly explain, a Charrette is "a period of intense design and planning for solving a design challenge".

In this case the project was to redesign two spaces in a hospice for patients living with Cancer. The brief also illustrated the data and information about the hospice centre, such as location, spaces, requirements, challenges, etc. (for more details, refer to Appendix #).

On the first day of the Charrette, at 10:00 a tutor and students gathered in the studio and discussed the brief for the hospice centre, the timetable for the three days, and what exactly constituted the project.

The tutor divided students into three groups of six to work on the project and they agreed to present their initial understanding and proposal at 16:00. Two groups preferred to work on the top floor, with the third group on the second level. Lots of discussions, researching and thinking took place.

The first group reviewed the patients' reviews of the hospice and focused on the issues they identified. They justified this as involving the patients themselves in the design process, which indicates their consideration of clients' demands. Thus, their concept was create a homely, relaxing place where patients can take their attention away from their disease and get involved in pleasant activities that cheer them up, connecting them

emotionally to the room. They successfully and collaboratively demonstrated what they had done and what their next step would be.

The second group stated the challenges and areas they wanted to consider in their design in a general sense. The tutor advised them to keep all challenges in mind and be more productive in the next two days to produce something more than talking and being inspired. He also insisted that they continue to write down any ideas they had. The group discussions were relaxed and slow, and should have been more energized between all students.

The third group focused on humanising the space. The tutor's main comment was about their communication; he stressed the necessity of discussing and communicating ideas well, as it was a critical factor for successful design. He gave them feedback on their presentation and encouraged them to maximise their potential and show their contributions to the project.

On the second day, the performances of the three groups had changed. They worked from early morning until 14:30 when they presented their projects to the second tutor. There was obvious evidence of competition, ego and self-esteem in their presentation.

The first group was dominated by a student Es.G who spoke about the design using personal voice, as she used "I did" rather than "we did". Another member of the group tried in the presentation to emphasise the group's involvement and he corrected her when she said "I" to "we" instead, which indicated tension in the group.

The second group applied the feedback they had received well and two students had taken over the presentation. They came up with some ideas and visuals and other students in the group were quiet and agreed with them (by nodding their heads).

The third group became more organised and had greater cooperative harmony in their work as their aim was "designing an excellent project". An imaginative student, Li. G., created a bulb plant representing a sustainable concept, greenery and energy resources.

She was very happy and proud of her creation and the members of the group admired it and were glad to include it, helping her to do it as well.

On the third day, the three groups had to present their completed design projects, showing some visuals and the concepts behind them. The first group aimed to provide a sense of innovation and sophisticated quality of design. Their concept was to provide a sense of nature and home in the room. Their idea encouraged patients to hang photos on a wall to create a personalised area in the centre. In the same room suspended from the ceiling a hanging garden was intended to bring a sense of living nature into the room, saving space as it could be lowered for care and watering. A sofa for relaxing was placed next to a fireplace. The materials proposed were all to be natural and inspired by nature.

One female student from the second group presented the project. Their design idea focused on three aspects: natural light, flooring and furniture. They emphasised the health benefits of lighting a space naturally, and their research had highlighted the health benefits of using carpeting. They also suggested a large photo from Inverness (which was the location for this hospice centre), using a collection of coloured sofas and a vintage tea table.

The third group's concept also relied on using natural materials. A bamboo wall, hanging lamp and book shelf were provided at the entrance. Bamboo could be dull, but it would not be too much. The rug should be unified as it could be seen or read as an obstacle or confusing for visually impaired patients.

The tutors liked the first group's design proposal, as they believed that students in the first group had responded creatively to the points mentioned by the patients or asked for, in addition to implying the values they had been taught. For example, this group emphasised the ideas of the hanging garden in response to green values and concepts, and the corner fireplace to add a warm cosy spot for patients. Also, they created a framed photos wall where patients could hang their personal photos of relatives, which helped to increase the sense of belonging and hominess. For dementia patients, the impact of colour coding

would help them to recognise their rooms.

From this experience, I can confirm that the charrette studio strategy is a challenging, constructive and inspiring strategy that results in amazing design ideas over three days. This learning experience shows students their hidden power and unused abilities, which increased their sense of pride and confidence.

7.3.7 Studio Experience: midterm critic

On the midterm critic, students were asked to present their concepts and proposed design ideas to the rest of the class on A1 boards. Only nine students attended the critique and the tutor was disappointed by the absence. After investigation, a huge party and concert on the day before were the reason behind the absence. In general, the students who attended and presented their work on that day were happy and excited with the comments and feedback they got. There were different levels of work between excellent and well attempted proposals. Here are some quotations of some students: “very constructive feedback.” “Oh God, I am glad I noticed this today. Otherwise, it will be a disaster”.

7.3.8 Studio Experience: peer review

Peer review day was when students had to present their projects to their peers for the last time before the final crit. The four tutors attended and the students divided into four groups, each group with one tutor. Most of the students attended this day and were active in presenting their projects. Their presentations were similarly structured: they explained their perspective on the project and how they reflected on the brief, the concepts they came up with, the actual design ideas, the creative spot or part and the materials and colour palette they used. Interestingly, the individuality of students clearly appeared in this session as each student reflected differently on the same brief and found different inspirations and challenges.

7.3.9 Studio Experience: final critique

The final crit day showed interesting presentations, powerful ideas and highly creative potential. It also showed a higher level of courage in criticising and defending ideas

among peers without any direct interference by tutors. However, there was a great sense of the competitiveness between students; it was obvious in their body language and facial expressions.

7.4 Institution 3 Observation (Case study 3 and Case study 4)

The third institution was a long standing school of art that became a faculty in a metropolitan university. The interior design programme was among nine other art and design programmes in this institution, which included some collaborative work during the year. My observations on this institution were divided into two cases: case three when observing the 3rd year cohort and case four when observing 2nd year students. For comparison purposes, year three in Case One with year three in Case Three will be analysed correlatively, and I will compare year 2 in case 2 with year 2 in case 4.

The built environment of the studio is the same place for both cases in this institution, so it is described once. However, the demographical information, the design projects and all other studio activities are discussed separately in two distinct sections.

7.4.1 The Built Environment

In this institution, there were three places used by interior design students: the main space (studio), the computer lab and the 3D workshop. The three places were spread over two buildings on the main campus of the University. There was a separate office for the tutors next to the studio room and there was no kitchenette in the studio.

7.4.2 Case Three (Year Three)

7.4.2.1 Demographical Data

This cohort included 18 students, 3 males and 15 females. There were five tutors: the course leader was key for students in all three years. Three tutors were spread over the three years as assistants for the key tutor and the fifth tutor was mainly responsible for CAD and digital aspects across the three years.

7.4.2.2 The Brief of the Project

Tutors gave the final year students a task over the summer holiday to look for a place for their graduate project. There were no obligations or restrictions about choosing their projects. On the first studio day, students were to present their projects and highlight the reasons for choosing the project, along with the site map, the floor plan and measurements, the feasibility study of clients, and the initial ideas or proposal concept for the project. In this way, students had the chance to explore the challenges in the real world and realise that boundaries were not just created by tutors. This step gave the students the experience of how, why and when to choose a project, as it developed their creative thinking.

2.2 Introduction to the Module

Specialised Practice in Interior Design In this module, interior design students are expected to reflect their theoretical knowledge and practical experience to develop the interior design project. The design practice in this module will demonstrate students' capacity to arrive at creative solutions within a planned schedule. The major project will be an interpretive and analytical individual design problems on adaptive re-use of existing buildings. The students are required to analyse an existing building and re-design its interior for a specific function and a design theme. The aim is to improve student's design thinking and to experience a demonstration of professional design process. During design development, the students are required to consider the needs and requirements on function, aesthetics, space identity, human factors, finance, building codes, construction and materials as well as user and client relations. Individual and group discussions will be held in the studio to explore the building design issues such as space functions, circulation, material and furniture use, and relationship of exterior and interior, fire safety and security.

The module is designed to prepare you for your professional life with lectures and presentations on professional practice and specification writing. The main task of the module is to prepare a rationale and developed concept for your project proposal. This will be a combination of your own theoretical and philosophical standpoint, as well as being an interpretive and analytical study of your client's identity and needs.

Within this context, the process of client-interviewing/ client mapping will be discussed to understand client/user requirements and needs in addition to information on codes, contracting and financial issues. You will start your research by producing a feasibility study that outlines your client, your site and your proposed subject. See guidance notes. In addition to this, you will produce a concept design which will form the foundation of your Major Project. You will explore and practice how to prepare a professional design portfolio and design specification book that includes information on the details of your designs.

Students will hone verbal and visual presentation techniques in this module through presentation of work in formal settings, informal groups and through industry critique. Formative feedback is available to you from each meeting with your tutors and peers.

This studio will model professional studios. You are expected to attend all scheduled sessions. We expect that you will demonstrate your time management skills at an advanced level.

Figure 14 A figure showing the project brief in institution three, graduate students.

7.4.2.3 Studio Experience: normal studio day

The third year students' timetable includes studio sessions once a week from 10:00 to 14:00. To simplify the description process of the students' cohort, students were divided over two groups; the first group constituted six British students and the second group was made up of international students. Every week the first group come to the studio they were on time and kept working, chatting and socialising. They did not show any willingness to integrate with other students and did not interact with other students. Other students described their actions and attitudes as conservative, which was not a targeted finding. However, I decided to include it as this situation had a negative impact on the studio atmosphere.

In this students' cohort, there was a group of students who preferred to discuss their projects with tutors to a minimum level, which decreased the richness of knowledge exchange in the studio as other students and educators stated. They attended the compulsory sessions in the studio, and sought approval from tutors on their ideas and designs, seeking clear advice and guidance to develop their projects. There was continued encouragement from the tutors and peers to share and exchange their knowledge, however they clustered together. In fact, this observation was interesting as it showed how personal attitudes and behaviours impacted on the studio environment. They did not come to the studio regularly every studio day, as they preferred to work on their projects at home. Unfortunately, they did not participate in my research, so I cannot justify their behaviours and attitudes.

The second group were the international students, who had different backgrounds, attitudes, cultures, values and personalities. Most of them tended to have lots of discussions about their projects and to ask for advice and opinions from their peers and tutors. Most of them came to the studio almost every day and set advisory sessions with their tutors if they needed help. Only four international students out of eighteen participated in my research from this cohort.

These findings show a significant issue in studio strategy, which needs further consideration in interior design education, as suggested by the literature. This finding will be discussed later alongside related issues.

7.4.2.4 Studio Experience: first day presentation

In the programme guidelines, students were informed that by the end of the 2nd year they had to choose their 3rd year project (the graduate project). This should be presented on the first day of the 3rd academic year. All students were required to give a presentation about their chosen project highlighting who, where, how, what, why they want to do. Only ten students out of eighteen presented their projects to the studio and they received

comments and feedback from three tutors. Most of the comments highlighted issues and problematic areas that would need further investigation and consideration.

It is interesting how different choices and projects were chosen by students and how their individuality contributed to their choices. Their cultural backgrounds also contributed to their choices and it was interesting how these cultural variations enriched the studio culture, providing different perspectives of the world. This holistic interaction is a key concept in the studio culture, and without it the whole strategy loses its power.

7.4.2.5 Studio Experience: final presentation

This was the final projects they for assessment during their bachelor degree. Thus, the educators, as mentioned before, expected lots of criticism and defensive discussions from students regarding their projects, ideas, presentations and grades. This led the tutors' decision to use 'silent crits,' a creative idea of presenting work and evaluating it. This presentation would be the final one before submitting their projects for marking. The silent crit strategy means each student displays all the work they produced on a table and the student should stand silently next to their work. They do not have the right to say a word and they cannot clarify any point or correct any mistake. The tutors and peers try to understand the projects through looking and discussing the students' work (boards, sketches and models). This assessment focused on the efficiency of visual communication of the work (as usually tutors assess the projects while students were absent). For me, it was absorbing to witness how students were keen to explain or defend their projects, or were shocked by witnessing others perceiving their projects wrongly. It was an exciting learning experience for how people can perceive and judge the same thing differently. Students left the studio with a much clearer idea of where their projects were not communicating well and had three weeks after to submit their final projects. This day showed the extent to which interior design students have an emotional connection to their projects and what criticism and feedback means for them, how it can impact them, and how their personality types can play a significant role.

7.4.3 Case 4 (year 2)

7.4.3.1 Demographical Data

I observed 12 students (2 males and 10 females): a mix of British and international students. They have a studio session once a week from 10:00 to 16:00/

7.4.3.2 The Project Brief

They had two projects to work on interchangeably during this semester; and students had to work in pairs on each project. The first brief was an environmental landscape project (A) as in Figure 15 (chose one of nine areas in the city and develop it). The second brief

was a commercial project (chose one of three retail premises and design it). The research observation included both projects.

Environment project

Group Project: A: Environmental project

Summative brief – concept design, mapping, drawing, problem solving

Interior design studio 3

Weeks 1 to 12

Studio

Year 2

Group project notes;

We will form project teams of two or three working on two projects concurrently.

In each team, one designer will be responsible for project managing one of the projects on offer.

Both designers will work collaboratively to design and document both projects.

It is important to develop management, negotiation and planning skills.

It is equally important to be able to run and work on several jobs at once.

These skills are desirable skills assisting designers to work professionally.

Each project manager will submit a communications and management folder detailing meeting notes, time planning, organization, allocation of tasks of the one project which they are managing. This should also include meetings with your tutors.

In this file, are also asked to evaluate **your own management** of the job and to determine what was successful, what was unsuccessful and how you would plan to rectify any of your concerns about your own performance in this assigned role.

Meetings to discuss group progress or any difficulties will be held in the second half of the studio day by course leader.

Over the page are a series of 9 sites. You ll need to visit these and decide on which site interests you.

Identify the problem/s of the site.

Identify the users of the site.

map the site and its use through drawing, casting, modeling.

What intervention do you plan, imagine or propose?

Show this – test this refine this and convincingly demonstrate this proposition.

You are strongly encouraged to explore alternate ways of drawing, mapping and visual communication.

Please see some of the selected examples on the VLE.

Deliverables

Use a considered and professional approach to the presentation of your work. Package of work should look cohesive and reveal the personality of your project.

Design portfolio to include;

- Brief and design statement
- Concept board
- 1 x floor /area plan showing overall concept
- sections showing overall concept
- rendering / collages showing the your concept
- story board of journey through space or fly through
- **Demonstrate your process;**
- Process sketch book/s showing;
- visual research, critique of ideas, sketch ideas, sketch layouts and sections (*note; every time you do a plan, do a section*)
- photographs of sketch models showing development of your original concept

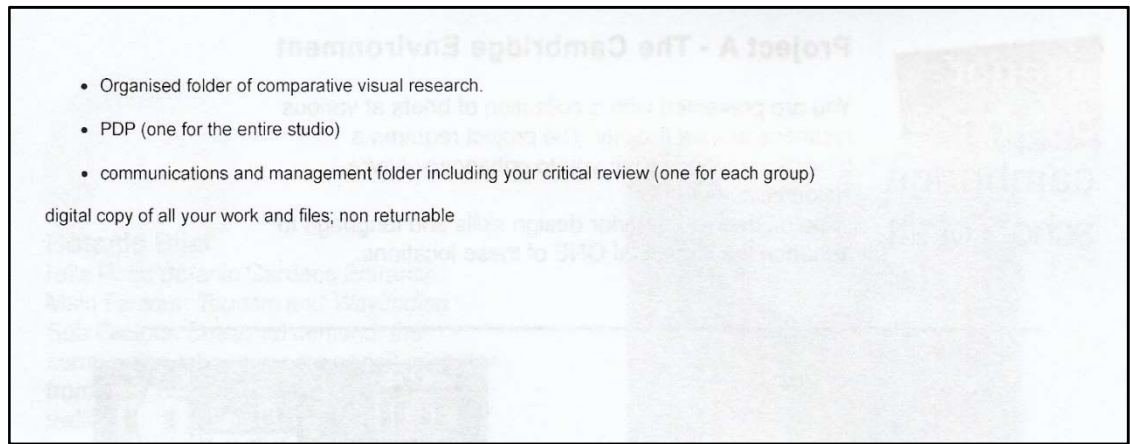


Figure 15 A figure showing the project A brief in institution three, year two students.

Commercial project

Group Project: B: Commercial project

Summative brief – concept design, mapping, drawing, problem solving, client, commercial comparisons and detail

Interior design studio 3

Weeks 1 to 12

Studio

Year 2

Background.

Retail design allows the designer to think about scale, presentation of product, detail, task, space planning, way finding, materials, lighting, and graphics. Retail design demands a creative approach to spatial and presentation problems and asks that designers respond to trends considering both inside and outside the premises as well as a series of physical activities within the shop.

How a shop looks from the outside, possible though not always seen through glass windows, can either invite or repel custom. Unique ideas excite us and draw us near, invite us to linger or ask us to leave quickly.

We are intrigued as consumers by elements that reveal themselves or which have a visual identity or personality inviting closer inspection or arousing curiosity.

Consider carefully what your shop is selling and how the product is best displayed and marketed. Part of this project is to produce a detailed design for your shop fixtures within the personality and concept you arrive at. Consider also the surrounding significant tasks required for the retail premises; such as storage, delivery, passage, sales and wrapping, security, and collection of wastes. Remember that the 3D visual communication is extremely important in this project.

In your groups as part of your initial research, you are asked to visit related shops. We will look at some internal and exterior streetscapes together. You are asked to take notes and make quick sketches of elements that you think are either successful or unsuccessful.

Use this research to combine with your own additional research for your design.

The Brief.

You are asked to design a retail premises that sits in a mainly pedestrian street. Identify your client and their clientele.

Undertake some indicative market research to position your shop within an appropriate market level. Use provided template.

Consider what it is being sold - product, service, market position and how it is to be seen from the street and presented within the shop.

Each shop will fit together in an exterior streetscape at the end of the project. In groups, you will need to think about a cohesive design strategy that links / contrasts the facades in some way and gives an identity to this small group of shops. Each group of shops will include: (This connection is a formative element of your brief and addresses a significant aspect of your professional development: collaboration and communication)

Jewelry store
Fragrance store
Teashop
Artisan Bakery

Deliverables:

Use a considered and professional approach to the presentation of your work. Package of work should look cohesive and reveal the personality of your shop, its clientele and market position.

Design portfolio to include;

- Brief and design statement
- Concept board
- 1 x floor plans
- 1 x set rendered floor plan
- 2 x sections of space
- 2 x elevations
- 2 x rendered elevations - interior
- 1 x rendered elevation - exterior
- Minimum of 1 x two point rendered perspective showing the quality of the space

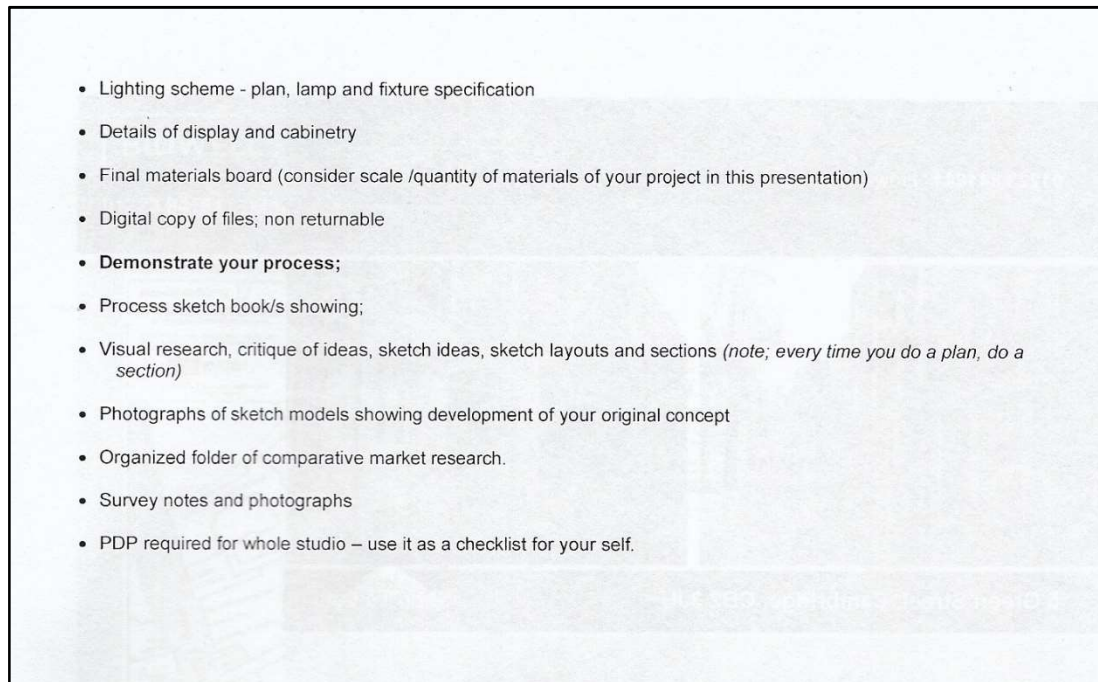


Figure 16 A figure showing the brief of the project B in institution three, year two.

7.4.3.3 Studio Experience: introductory day

Students were given an explanatory lecture on the briefs for the two projects they would be working on this semester: the environmental project and the commercial project. In the environmental project, they had the freedom to choose whomever they would like to work with. In the commercial projects, they were allocated a partner by tutors. Tutors explained the two projects in detail, including the options they had and what they were required to show. Then, tutors asked all students to go and visit the actual places for the environmental projects, to choose one of them based on personal preference and experience. They went in groups with sketchbooks, cameras and measuring tapes. All students went on an exploratory visit; asking people about the place, taking measurements and photos, sketching and taking notes on their observations. Then, they came back with clear idea of the places and when they returned to the studio they discussed their visit and they were almost clear on what they going to choose. In general, this cohort seemed to respond well to the course. They worked in harmony and had a networking and friendly attitude.

7.4.3.4 Studio Experience: first presentation of their projects

Students gave presentations about their choice of environmental projects. They had to explain: why they chose it; what the key issues and challenges were; how they would criticise the current situation; how they could serve the community with a better place; and what their proposals and concepts were for their anticipated designs. In pairs, six groups presented their initial ideas and recommendations for the projects. Different perspectives and issues were been considered depending on the values prioritised by each group. Different presentation ideas and materials were used, which reflects a sense of engagement with the project. However, there was a difference of energetic, excitement, engagement and introversion among students who worked with a friend as partner or who collaborated with a non-friend as partner.

7.4.3.5 Studio Experience: normal studio day

Students worked on their commercial projects in pairs. Their choices were personal. Interestingly, each student from the pair thought, reflected, sketched, proposed ideas, colours, or materials individually, then they gathered at the studio and to evaluate, compromise and synchronise both proposed ideas. I found this step developed their skills to work individually and in a group. On that day, all students were exceptionally focused and when I asked why, they stated that they needed to work harder to finish both projects before the Christmas holiday. They said, “we want to have and enjoy our Christmas and New Year with families and there is no time to work the holiday afterwards”. This emphasised the importance of taking into consideration all factors that influence students’ productivity and engagement.

7.4.3.6 Studio Experience: the final presentation

Students were supposed to start presenting their projects at 10:00. They arrived at the studio earlier to prepare their presentations. They were stressed and nervous; some had sleepless nights and some had technical issues with CAD on the last day. The presentations showed a variety of concepts and ideas and a variety of presentations and

communication approaches. The students' attitudes showed that they cared about feedback. They documented and applied it to get better results and grades. Each group asked another student in the studio to take detailed notes of the tutors' and peers' comments so they could be considered at every point. Reactions to tutors' feedback and questions varied from student to student. Some explained logically why they did their projects this way, others defended their design decisions and rejected any negative comments. Some students were in between accepting, negotiating and applying the feedback to develop their work or to satisfy the tutor. These differences will be discussed further in the personality discussion chapter.

7.5 Summary and Conclusion

This chapter has demonstrated the descriptive analysis from the ethnographical observations in three interior design studios across three institutions in the UK. For each case the interior design studio was described, including; the environment, the culture, activities, and the pedagogical dynamic. The comparison between the three cases shows that there are six main similarities and five main differences which will be summarised here.

The similarities, spread over different areas of the observation, have been coded and categorised under certain themes. The first similarity was with regard to students as individuals in a culture, which was the basic demographical data, as the majority of students were females and the minority were males across the three institutions. There was no clear reason for this finding, but it could be justified by the general confusion between interior design and interior decoration in relation to the historical background related to feminist, as discussed in the literature. The second similarity was about the studio environment where the three institutions had the same physical elements, in a broader sense: large area plan, drawing tables, presentation equipment, and CAD lab. This can indicate that studios kept the original idea of having one spatial area for students. However, to cope with modern demands the CAD lab was added as a development in the domain. The third similarity was the professional terminologies used by educators and

students in the studio, like 'design concepts,' 'project type,' 'practical process and steps of designing projects,' drawing, and modelling terms. These terms were commonly used in the studio time, and are not commonly used in every other pedagogical context.

However, it presented a pattern for the design process, which was used in a dynamic process. The fourth similarity showed overlapping values, like creativity, aesthetic, functionality, feasibility, sustainability, competitiveness, collaboration, and development. These values appeared continuously in relation to the process of design from educators and students. However, creativity was a core element in all contexts even in the briefs of the projects. The fifth similarity was about the pedagogical practice in the studio, as tutors were always available during studio time for peer discussions or one-to-one tutoring. This fundamental saturated finding was vital for the research context and will be discussed further. The sixth and final similarity was also a conceptual theme in the pedagogical practice in which all educators acknowledged their recognition of personal differences between students, but there was no clear strategy they followed in dealing with these differences.

On the other hand there were five main differences. First, there was a clear difference in the quality of the physical places and the equipment standards, which might have an impact on student performance. Second, the one-to-one tutoring system between educators and students followed different dynamics across the three institutions. In the first institution, the same tutor conducted the sessions with all students, and tutoring took place every week throughout the semester. The second institution had a circulation system, as each student had a one tutoring session maximum two times per project. Whereas for the third institution there were two tutors for each year level, and students had tutoring sessions with either of them. The tutoring dynamic that existed in interior design pedagogy took multiple forms depending on the educator's perceptions and experiences, but there was no clear understanding of these differences. The third difference was the crit sessions and assessment strategies. As educators in each institution took the initiatives to invent new strategies to tackle the issue of subjective

judgments for different outcomes. The fourth difference was that each educator emphasised certain values in studio time, which influenced students' perceptions and values. Thus, there were clear differences between the three institutions in terms of values and priorities which underpin their practices in the studio. This point will be discussed in the following section when analysing the definition of creativity, as it is the core of this research. The final and fifth difference was that each educator had a personalised teaching strategy that responded to their personal context, and there was no one clear strategy uniting all of them. This analysis generated a Grounded Theory that help me to understand the interior design studio, which is a place where sociocultural processes and individuals interact under a disciplinary pedagogy generating forms and visuals that serve the profession. This theory will be discussed in relation to the literature and supported by evidence from the data in the next chapter.

Chapter 8: Interior Design Studio: a place, a culture, or a pedagogical paradigm?

8.1 Introduction

The findings about interior design studio are explained in this chapter after analysing the data from the three cases observation. This chapter merged the literature information with the findings on the studio to provide a coherent piece of developed knowledge related to an exciting body of knowledge. This reading is essential to understand the interior design studio from different perspectives.

In the literature, the studio is the first and most basic teaching paradigm of interior design, delivering successful outcomes and significantly developing the profession over the last decades, as stated by Denise Guerin and Asher Thompson (2004). In fact, it is obvious from the observation and interviews that a studio-based paradigm will continue in the field of interior design and has begun to exceed the educational area to become a professional paradigm in its own right. Therefore, it is essential to understand the current situation and perceptions of this pedagogical paradigm and how it developed.

On the other hand, as discussed in the previous section interior design studio is perceived among students and educators as a place that host individual interactions; a sociocultural process that capture the interactions between group of professionals and students under the educational hub; a pedagogical practice that generates forms of creative ideas and visuals to feed the profession. Thus, this section will discuss three aspects of the interior design studio from: the physical environment (place), the sociocultural aspect, and the pedagogical paradigm. It will collate all the data under these three themes to construct and document the context in a natural setting.

8.2 Interior Design Studio

As a place, students and educators discussed five necessities for the physical environment of the interior design studio:

- 1) A large, open space preferably with natural light source
- 2) Essential equipment such as drawing tables, chairs and modelling materials

- 3) Convenience facilities, such as toilets, kitchenette and sofas
- 4) Computer lab with CAD software and internet access
- 5) Resources and materials for expanding knowledge: books, journals, magazines, catalogues, samples and references for students

However, there was more concentration on the general atmosphere. As stated in the findings, there are contradictory opinions about the studio space among educators and students. Some students considered being in an active, vibrant, busy place encouraging and motivating when thinking about and working on their projects. For example, El.L from institution one stated “I prefer working in the studio, because being work with lots of working people helps motivates you as well like kind of group work effect”, so it is a motivational space for her.

Ag.G described the studio thus: “it’s a working environment, the studio making you work and it makes you do more, develop ideas..... If I stayed at home, I would get distracted all the time”. Moreover, the majority of students described their need to have two types of space in the studio: an active, busy space and a quiet, personal space. They stated that each environment was used for a specific thinking phase or designing process. Li.G described how she identifies different areas in the studio to do different parts or phases of the project. At the beginning of a project, she prefers to be with a group in the active spot and when she is focusing or developing idea she prefer the quite area in the mezzanine.

On the other hand, this atmosphere is distracting and overwhelming for other students in the same institution. Ma.G, said it felt like “too much information coming in and hitting your head” and Vi.G described the studio as loud noises, busy distracting space, over bright, lack of privacy and quietness. Another extreme example is Ji.C, who stated:

“I find it very negative space, at home I’ve got my whole desk. I have a room the size of the garage that is my studio. And I feel more at ease working in my own space cause I’ve got everything where I want it to be. And this to me is not a comfortable environment for me to work in. I think because the studio is used by so many”

From these findings, several observations can be understood, such as why some students are absent most days and other students within the same institution always show up. Thus, personal differences should be considered and the studio design should provide personal areas and group areas for all preferences.

As stated in the literature chapter, Hill (2007 p.38) defines studio as “an educational setting where students are physically located together in a common area utilizing manual or digital production methods.” I would develop this definition to include personal output, by adding: intellectually sharing their cognitive processes and personalities by sharing their attitudes and behaviours.

8.3 Interior Design as a Culture

The studio culture is hard to define as every studio has a unique culture. However, as the AIAS understood studio culture by stating “Perhaps nothing is more revealing of studio culture than the actions of its students to promote this culture” (Koch *et al*, 2002 p. 5). In any interior design studio, the culture is constructed by the students - who share the interest in designing places – and the studio culture could be described through their actions and behaviours together. As discussed in the literature, the AIAS reported that the studio culture needs to change now, and they encouraged adoption of five important values; optimism, respect, sharing, engagement, and innovation. As students are usually exposed to the same range of activities such as; searching, drawing, constructing, and discussing. Therefore, instilling these five values would double the learning outcomes for students.

Therefore, in the interviews some students described their studio as a ‘culture’ when they point out peers and tutors who share perceptions, ideas, values, language and norms. Also, members of this temporarily constructed culture may endow charismatic individuals with a certain status. Here are some examples of how students perceived studio culture.

Ca.L from institution one stated that “closer to deadline, more people do come in –the studio- I mean towards the end of last year, about eight of us were in from nine till seven

nearly every day, and we were bouncing ideas which kind of is the atmosphere. We did say we should do this all the time, but it just motivate people to come in and get in towards the end". This statement supports the observation in the first institution that students are not all working in the studio at the beginning of the semester. Whereas, most of them were more engaged and motivated to work together towards the submission deadline. That could be due to cultural reasons or personal preference. "While no one is forcing students to stay up all night, the current studio subculture encourages it. Studios are usually accessible 24 hours a day. Well-meaning professors sometimes offer criticism so late in the process that students have to stay up all night just to address their concerns (Anthony, 1993 p. 40)."

Es.G says "you've got a studio day and it's your own time and you sort of organise it yourself", which shows how she feels free to do what she wants to.

Ro.G "it's really nice at how informal it is. And then seeing everyone else working, it is a good environment."

Ed.C. "It's nice to see the other students working as well. Sometimes you take the same brief and you see three students working in a complete different way, that's kind of, wow. That's inspiring. That's makes you think that anything is possible"

These examples show that students are learning from each other and inspiring each other. This learning environment shows peer learning and social interactions that teach students social skills (Koch, 2002), which is related to progressive educational theory (Dewey,1997). The studio is a hub in which each student shows who they are, what they have got, how they think, how they create and how they process information and generate ideas. This variety of cognitive abilities and skills is what motivates them to 'look', 'know' or even 'be inspired' by other students.

8.4 Interior Design Studio as a Pedagogical Paradigm

As a pedagogical paradigm, students across the three institutions and within each institution are exposed to different teaching attitudes. As mentioned before, each

institution has different perceptions of education theory and practice, however all three institutions emphasise the importance of creativity in the interior design education and profession. Although, they have different implicit meanings of the term, the studio dynamic is grounded on the concept of “learning by doing” (Clausen, 2010). ‘Doing’ takes a variety of forms, including drawing, building, sketching and playing, and all can foster creativity.

Institution one focused on the quality of design, in the studio as a place with respect to the creative process toward solving issues of this space. Institution two focused on developing intellectual abilities in dealing with life challenges and responding to market demands.

Institution three focused on developing a professional awareness and thinking processes in a way that develops ‘visual sensitivity’.

However, students across the three institutions showed high potential to be independent adults with personal preferences, values and personalised ways of thinking and communicating their ideas. In the final presentation, we see a fascinating variety of visuals, which shows the unlimited possibilities of doing in the field of interior design. This is a major distinction between the architecture and interior design studio, as architecture is much more focused on construction, whereas, interior design includes all components of the built environment. This finding is supported by the argument in the review of the literature of andragogy versus pedagogy of the practices in institutions of higher education. The studio session gives students and educators the free time and space to do, practice, test and experience whatever they believe and what matters for them as interior designers.

Another aspect of learning in the studio is personality development. Lu.C from institution three discussed the learning outcomes she acquired from the studio and the learning paradigm. She indicated what she was offered in the studio: “I’ve found it quite a supportive course, looking at other people’s work. Seeing the different stages that people are at. Walking round you get, constantly all the time thinking about work you know... get a lot of peer feedback... get a lot of crits.... see him [tutor] within half an hour with any problems you’ve got”.

She also described the learning outcomes that she felt: “I used to be quite defensive about my work even if I didn’t feel confident about myself and when I used to get crits and feedback I used to take it as a known, now I take it to make me grow.... it helped me push myself further”. Her statement shows cognition of personal development.

Another example from institution two, Vi.G. explains the learning outcome thus: “it’s rearranging your point of view of life”, which seems a big learning objective to have.

Educators play a crucial role in the studio paradigm, as they are trying to maximise learning objectives using different educational approaches. For example, in institution one, the educator stated that “I get these students to observe and look as much as they can, teach them how to think rather than to design and how to make decisions more than anything really”.

Whereas, in institution two every week the students have different tutor with different perspectives (interior design in practice and in learning and teaching or digital and technical experts). Students find this very useful in terms of learning different perspectives in design as they had to respond to it, which stretches their own perspectives.

In institution three, there are different tutors who are present every week, and each student chose the preferred tutor to briefly explain what they had done. In contrast, institution one has one tutor and one digital technician, and all students respond to one perspective in design. This comparison shows how in institution one student’s are less challenged as they face the comments and feedback from the same tutor every week. Whereas in institution three students must perceive, react to, and convince different tutors with different design perspectives, which is more challenging (Kuhn, 1992). Thus, I would recommend applying the studio approach involving several tutors.

All tutors use a common language (the design concept or idea, the challenges of the project, feasibility study...etc.), values (aesthetic, creative ideas, budgeting, client satisfaction, functionality, sustainability...) and behaviours that appears in all studio times (brain storming, questioning, discussing, observing...etc.). However, each educator has

his own understanding and interpretation of what interior design is, what we should teach students and what they should do when they graduate.

8.5 Summary and Conclusion

In conclusion, the interior design studio is a holistic educational paradigm where place, activity, learning, interaction between educators and students takes place and constructs a culture. Generally, educators perceive the studio to be a place where they are responsible for the process of students' learning, skills and abilities to meet the requirements of the professional standard and proficiency of interior design. However, across the three institutions, each educator has different perspectives of interior design and how it should be taught. Therefore, each tutor has described his/ her experience in teaching interior design from their own perspective and they constructed their teaching strategies upon these perspectives.

In contrast, students described the studio as a “transforming place” where they become able to achieve their individual goals. Each student stated a specific aim for the future and not all of them intends to be an interior designer only; they have personal aims and objectives like kitchen designers, office designers...etc. This justifies the different uses of the studio from one student to another. Some students perceived the studio as a learning place where ideas develop and the design process transfers information into multiple ideas and designs. Others perceive it as a place where students show their special potential, which feed their ego and self-esteem.

Chapter 9: The analysis of the students' definitions of creativity from their interviews

9.1 Introduction

This section is the main analysis of student interviews, and it constituted of four main sections. First, the analysis of the students' definitions of creativity independently, generating thematic categories, emerged from the data. Then, a constant comparison analysis of the emerged categories will be analysed in relation to; personality types, thinking styles, and educators' definitions. Finally, the generated grounded theory of the definition of creativity in interior design is discussed.

The following section will discuss; first, the findings under these five categories, stating the main codes used in each category. Second, these categories of the definitions are put in relation to the Myers Briggs Type Indicators personality types, and third, the definitions are in relation to the 6 Thinking Hats. The last is a discussion of the students' definitions of creativity in relation to their educators' definitions using the categories and codes as a guiding tool.

9.2 Discussing the analysis of students' definitions of creativity in relation to the literature

The coding tables (Appendix p. 469) shows that students' definitions saturated under five main categories. Definition of the creative person, creative product, creative process, user centred creative place, and open ended creativity definition. This section will be discussed in relation to the Sir Ken Robinson definition and explanations of creativity. As his notions around creativity are one of the main blocks that build the conceptual framework underpinning this research.

9.2.1 The creative person

There are twelve students who defined creativity as a creative person. Students who perceived creativity as a person used different terms as human descriptions. Some of the descriptions used are metaphors like; "fire," "sparks," and "stubborn woman," whereas some gave description like "uncontrollable," "unstoppable," and "in soul." All of them emphasised the ancient definition of creativity in terms of "divine inspiration" or "exceptionally gifted" individuals (Craft, 2008).

"Motivated person" is another way to describe a creative person for some students.

Although it has been discussed as a creative process in some literature, it is also perceived as the significant factor to nurture creative potentials. Here a motivated person is considered as an individual with a strong desire to be creative. This is what has been described as the "willing to be," which is an important element. This definition implies the notion that creativity is a nurtured human ability. As Sir Ken Robinson stated "Everyone has huge creative capacities. The challenge is to develop them. A culture of creativity has to involve everybody, not just a select few" (Robinson, 2011, p.3).

"Imaginative person" is another description of a creative person used in students' definitions of creativity. Imaginative is a personal capacity to see unlimited possibilities of non-existing settings or past memories in our minds beyond present reality. As humans, "We have imagination" (Robinson, 2011, p. 17), however, not all humans are imaginative. The person who tends to imagine more, living in his/her imagination and daydreaming is perceived as a creative person.

The flexible person reflects the individual's ability to respond quickly and differently coping with new challenges or situations. However, what is meant here, is a person whose flexibility is a part of his/her natural behaviours. So, the ability of "being flexible" in dealing with different circumstances, or solving problems with unconventional solutions is also one way to describe the creative person.

9.2.2 The creative product

Eleven students defined creativity using expressions that fit under the creative product category. It could be discussed as a creative visual or innovation. These descriptions are: "textured space," "original visuals," "new visuals," "amazing visuals," "unique presentation," "personal design," "beautiful places," "abstract visuals," "different," "impressive design," "interesting," "improviser," "beneficial," "helpful" and "unexpected innovations." These descriptions indicate the practical field (beautiful places) and pedagogical field (unique presentations). This shows that there is a common implicit understanding of the concept in a domain.

According to Sir Ken Robinson's explanation, a creative product or innovation is "the process of putting new ideas into practice" (2011, p.3). This quotation justifies why students used mostly two-word phrases to describe their perceptions of the creative product, the first word representing the idea, second word representing the practice.

9.2.3 The creative process

Thirteen students defined creativity as a creative process, and their definitions could be divided over two main forms among student perspectives: the thinking process, and the physical process.

The thinking process is the cognitive cycle or process that students begin with to generate creative product, and usually they rely on their imaginative ability. Students used their own vocabulary to describe their thinking processes, such as: "reconstructing," "transforming," "questioning," "drawing," "personal thinking," "personal process," "different perspectives," "lateral thinking," "vertical thinking," "progressive thinking," and "thinking out of the box."

The physical process indicates that the creative process begins with a physical experience, which ignites the cognitive process. Students stated five main physical

processes that reflects their creative process, these are: “innovative visualisation,” “drawing the ideas,” “making models,” “analysing ideas,” and “hands on experiences.” The thinking and physical process of creativity are both perceived as an innovating process (Robinson, 2011), as both are about the transformation process of an idea into a valuable outcome using cognitive imagination.

9.2.4 User centred creative press

Seven students have defined creativity as a user-centred press. This category emerged from students’ direct perception of a creative space or design if it fulfils certain criteria for the users of this place. Functionality and practicality of a space for the users were the most repetitive code in this category. Then, the rest of the expressions were as follows: “the experience of a place,” “balance between the design and life in a space” “human reaction of a design,” “human taste of a place,” and if users found a space inspiring. This category shows how some students have more focused perceptions of creativity related to their discipline. According to Sir Ken Robinson’s (2011) explanation of creativity, it is “the process of developing original ideas that have values” (p.3). In the discipline of interior design the satisfaction of the end user of a place is the most important value, thus some students have focused their definition on this value to create a place that will satisfy the user.

9.2.5 Open ended creativity definition

Five students found it very challenging to define creativity, so they defined the term using very open ended perceptions. One student stated truthfully that they do not have a definition of creativity, she stated that “it is difficult to define creativity.” Other students used open terms like “anything” “everybody” “no agreement” or “no clear characters” for creativity. Back to the quotation stated earlier by Sir Ken Robinson that “Everyone has huge creative capacities. The challenge is to develop them. A culture of creativity has to involve everybody, not just a select few” (Robinson, 2011, p.3). Theoretically, students have an implicit creative ability, but they need individual help to know their personal creative capacity. Their definitions will be discussed individually later in the discussion section of individual students.

9.3 Discussion of the creativity definitions in relation to students' personality types

This section will discuss the codes and categories that emerged from the creativity definitions of students in relation to their personality type based on Myers Briggs Type Indicator code. This discussion aims to reveal any correspondence between the two aspects for defining creativity in interior design pedagogy. The analysis interpretation process, guided by the same resources stated in the methodology chapter, included my subjective interpretations of these respondents.

9.3.1 Institution (1)

There are three interesting correspondences appeared in analysing the data from the first institution. First, all students who indicated creativity as a *product* have Sensing (S) personality code in their personality type. Which explains their tendency to relate to visual or tangible products. Whereas, the student who indicated that creativity was an innate power in a person, holds the INtuitive (N) code in their personality types. Second, the four students holding the Introversion (I) code stated that they defined creativity as a *person* who gets inspiration from their inner world such as innate passion, ideas, and desire. Whereas, the three students holding the Extraversion (E) code in their personality type defined creativity as a *person* who is inspired by interacting with the outer world, taking inspiration and creative outcomes from challenges, colours, and drawings in their outer environment. Third, students who indicated in their definitions of creativity that there is a *physical process* of creativity have the Sensing Judging (SJ) combination in their personality type. David Hodgson (2012) describes this as a 'guardian's personality' with a tendency to set clear rules and follow a process. Whereas students who indicated a *thinking process* as creativity hold Thinking (T) codes in their personality types. Interestingly, students who have Perceiving (P) code in their personality type stated both a *physical process* and a *thinking process*, which indicates the flexibility of using both processes. The *physical process* indicates the process of doing as part of developing the *thinking process*, whereas the *thinking process* is about cognitive processes that lead to doing or acting.

9.3.2 Institution (2)

In institution two there are three main findings raised from the creativity definition in relation to the personality type. The main two definitions from the data accumulated centre around *creative product*, and *creative press*. The first finding is the theme of *creative press*, as student definitions focused on the user and the place around the user. Human experiences that respond well to the aesthetic and functional elements in a place are considered to be *creative press*. Despite the different personality codes held by students, five out of seven shared this definition. Thus, in this institution there is evidence that student definitions of creativity were influenced by the interior design disciplinary context. The second finding was that only two students who did not embody the same conceptual theme held the INtuitive Thinking (NT) codes in their personality type. The NT combination is labelled as Rationale personalities who tend to have their own implicit meanings of any concept. This finding proves how the personality type leads to expectations of having different understandings and attitudes. The third finding showed six students emphasised that creativity leads to *creative product*, and for them tangible production is a must for creativity.

9.3.3 Institution (3)

In institution three there were two main findings in relation to creativity definitions and personality type. First, there are seven students out of nine who hold the Sensing Judging codes (SJ), which suggest a guardians' personality as Hodgson stated. Corresponding to this code, students defined creativity as *product* or *process*. This explains how they constructed a personal meaning and criteria for creativity, using their own methods of collecting information, as *product* represents the Sensing (S) personality and *process* reflects the Judging (J) code. Second, the two Introversion INtuitive Feeling students defined creativity by including *process*, *products*, and *person*, which reflects their Idealist personality according to Hudgson. Idealist personalities tend to think in different directions to reach an ideal situation, which underpins their multiple category definitions.

9.4 Discussing the relationship between students' definitions of creativity and the Six Thinking Hats results

Looking at the five main categories that emerged from the coding process of students' creativity definitions in relation to the individual order of the six thinking hats shows considerable correspondence. By focusing on the green hat which represents creative thinking, five main findings were revealed.

First, when students put the red hat, representing feelings and emotions, next to the green hat the creativity definition falls under the *person* or *human users* categories. Second, when the students put the yellow hat, which stands for possibilities and varieties, next to the green hat the creativity definitions take broad possibilities of being defined as an open concept, or as a *person*, *product*, and *process*. Third, when the blue hat that represent time management, is placed next to the green hat the student definition falls under the *creative process* category. Fourth, when the student puts the black hat that represent the criticism and cautious, next to the green hat students' definitions take multiple categories with different personal codes. Fifth, when the green hat came earlier in the ordering, students showed tendencies to be creative, and when it came later in the ordering, students showed tendencies to be less creative. To draw this conclusion, I adopted educators' feedback and side discussions about students' performance as my reference. I have not include the raw materials of this data for ethical and confidentiality reasons, however, this important correspondence should be noted as it is in the core of this research.

The following discussions will provide thinking styles of students in institutional tables.

9.4.1 Institution (1)

As shown in table (1) a significant finding shows there is clustering of certain hat colours in certain columns, and an absence of some colours in other columns. For example, The White Hat (collecting information) clustered in the first column and appeared in the second and third columns, but did not appear in the fourth, fifth, and sixth columns. The opposite happened with the black hat, which represents (critical and cautious). It does not appear in the first three columns but it does appear in the last three columns. Interestingly, the

yellow hat (possibilities and benefits) clustered towards the end as well, alongside with the black hat.

Table 7: a table of the Six Thinking Hats done by students in institution (1)

Student	1	2	3	4	5	6
Go.L	White	Blue	Yellow	Black	Green	Red
Ca.L	White	Blue	Red	Green	Black	Yellow
Eli.L	Red	White	Green	Black	Yellow	Blue
Je.L	White	Green	Red	Blue	Yellow	Black
Gr.L	Green	Red	White	Black	Yellow	Blue
Fr.L	White	Blue	Yellow	Red	Black	Green
Ja.L	Blue	Green	White	Red	Yellow	Black

This finding shows a thinking process pattern that starts with collecting data and brainstorming in the beginning, and looks for the pros and cons towards the end.

Whereas, some coloured hats are spread over most or all of the columns. Mainly, the green hat (creative thinking) was spread over the six columns, and the red hat (feelings and emotions) spread over five columns, while the blue hat (management and organising) spread over four columns. This pattern shows correspondence with creativity definitions, as most students who placed their green hats with the black hats defined creativity as a *process* or *product*. Whereas, the students who put their green hats with the red hats defined creativity as *person* or *press for users*.

9.4.2 Institution (2)

As shown in the table the interesting finding here is the pattern of the thinking process in the institution. The white hat clustered in the first two columns, but it does not appear again later, which shows that all students collect data and start the research phase in the beginning of their projects only. The black hat clustered in the middle columns (third and fourth), suggest they start thinking critically about problems. The yellow hat mainly emerges to solve the problems, it clustered in the last two columns. The red hat appeared

in the first two columns and the last two columns, alongside with white hat and yellow hat clusters.

Table 8: a table shows the Six Thinking Hats order done by students in institution (2)

Student	1	2	3	4	5	6
Ag.G	White	Green	Blue	Black	Red	Yellow
Es.G	Red	White	Green	Black	Yellow	Blue
Li.G	White	Red	Green	Blue	Yellow	Black
Ro.G	White	Yellow	Green	Black	Red	Blue
Vi.G	White	Red	Blue	Black	Green	Yellow
St.G	Red	White	Black	Blue	Yellow	Green
Ma.G	White	Blue	Black	Yellow	Green	Red

By focusing on the green hat (creative thinking) two main colour patterns emerged. First, the four students located at the top of the table have their green hats after red or white which indicates inspiration by feelings of through data collection. Whereas the three students located at the bottom of the list have their green hat after the black hats, which emphasises the solving problem notion. Interestingly, the main definition used was the user focused *press* or *product* that provides an experience.

9.4.3 Institution 3 (Second year student)

Table 9: a table of the Six Thinking Hats done by second year students in institution (3)

Student	1	2	3	4	5	6
Lu.C	Red	Green	Blue	White	Yellow	Black
Ji.C	Red	Yellow	Green	White	Blue	Black
Ma.C	Red	Blue	White	Green	Yellow	Black
Ri.C	Red	Yellow	Green	Blue	White	Black
Ed.C	White	Red	Green	Black	Yellow	Blue

As shown in the table, the red hat (feelings and intuition) clustered in the first column, the black hats clustered in the last column, and the green hat clustered around the third column. Yellow hats clustered in the second and fifth columns, and the blue and white hats spread over the four middle columns.

This thinking pattern shows how feelings in earlier stages (first and second column) lead to creativity (third column). However, the black hat (critical thinking) is the last choice for all students except one student who chose the blue hat.

From my observation, the course leader was emphasising that students be free and widen their minds as much as possible, and not think critically about issues or practicality, as it was a part of the intended outcomes of their projects. Interestingly that was reflected well in the thinking pattern of the cohort, which shows a consistency.

9.4.4 Institution 3 (Third year students)

Table 10: a table of the Six Thinking Hats done by third year students in the institution (3)

Student	1	2	3	4	5	6
An.C	Green	Blue	White	Yellow	Red	Black
Be.C	Yellow	Red	Green	White	Blue	Black
Ta.C	White	Blue	Red	Green	Black	Yellow
Mi.C	White	Blue	Black	Yellow	Green	Red

As shown in the table, the thinking pattern shows some repetition as two whites in the first column, three blue in the second column, two yellow in the fourth and two black in the sixth column. As they are third year students, the course leader was encouraging them to treat their project as a real project in the real world. This explain their tendency to make a structured plan represented by the blue hat in early the stages, and it shows some correspondence with students personality types which leads to differences in the patterns.

9.4.5 The general pattern of the Six Thinking Hats across the three institutions:

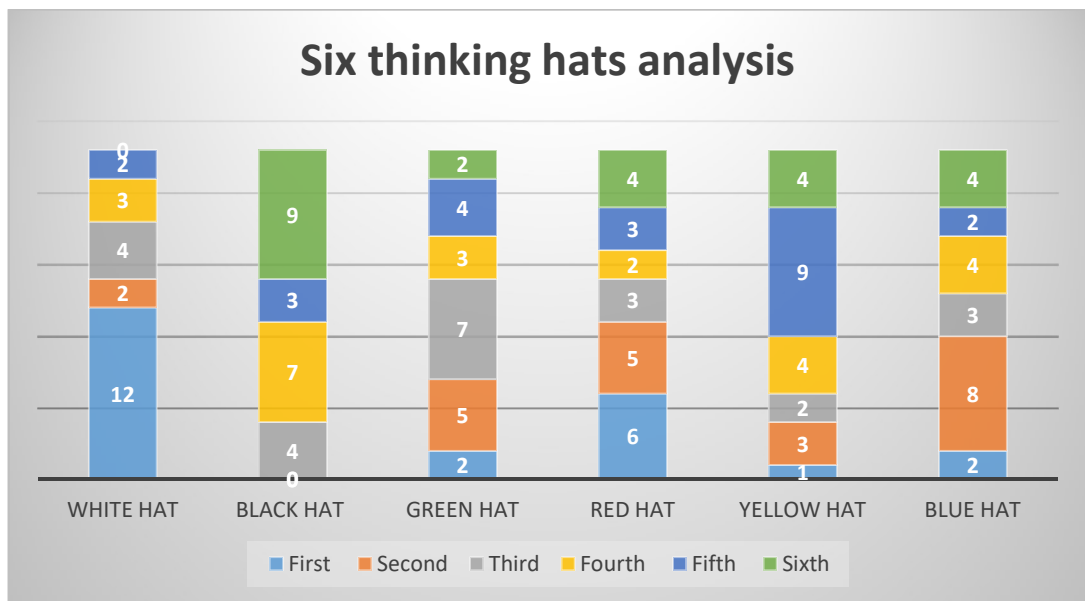


Figure 17 a chart present the summary of the Six Thinking Hats activity from the students' interview

As shown in the chart above the general pattern of thinking styles across the three institutions shows important findings. 12 students chose the **white** hat in the first place, and no student chose black in the last place. Conversely, no student chose **black** in the first two places, and 19 students chose the black hat in the last three places, especially in the sixth. 14 students chose both **green** and **red** hats in the first three places, which shows a correspondence between them and the thinking process. 13 students chose the **blue** hat in the first three places. Whereas 17 students chose the **yellow** hat in the last three places.

9.5 Discussing students' definitions of creativity in relation to their educators' definitions of creativity

9.5.1 Institution (1)

The course director defined creativity as:

“Show me something I’ve not seen before. I suppose if they listen to what I have said and how they interpreted or translated to their own language or their own vocabulary rather than just copying what I have said. The once do take risks... the once do overcome that fear of failure... the ones you can see them develop their intellectual or develop their creative abilities and they understood what they’re here for. Which is to challenge themselves and to surprise me, show me something that is different”

Interestingly, students' definitions of creativity in institution (1) showed correspondence with their educators' definition as stated above. It is amusing to see how students responded or interpreted the educators' definition into their own personal way of thinking, constructing their own perception of creativity.

The first point to analyse is the meaning interpreted from the educator's definition, as the phrase “show me something different” aligned with the originality concept, whereas creativity is a more complicated concept that includes originality (Fredrickson, 2001; Runco, 2014). Originality is the production of something new and different from older ideas, whereas creativity is an original production that is valuable (Fredrickson, 2001; Robinson, 2011). Thus, the tutor emphasised the originality part in his definition which was reflected in students' definitions.

Another finding raised from the data showed that student definitions reflected the educators' definition, which is analysed better by discussing the Mirroring theory. The Social Mirror Theory explains how people express and define their internal thoughts and reflections through other's thoughts and words (Whitehead, 2001). Although this theory was not part of the literature review, it is an extension of Vygotsky's social theory discussed in section one. The main idea here, is that most of the participating students were influenced by the educators, however there was one student who was not. Six of the seven students reflected the educators' definitions and five indicated that creativity is

about visuals, which matches the exact term used in their educators' definition. The sixth student stated "pushing my ideas and challenge myself to design an innovative design." Also, they used the exact expressions as he did to describe these visuals, which were: "unique," "new," and "never seen before." However, one student brought a totally unique definition of creativity and used a personally constructed metaphor. The interesting fact that the six students share the **Sensing** preference, which indicates a person's use of the senses to construct their ideas and gain their energy. Whereas, Gr. L was the only different student who had the **Intuitive** preference (INFP), which indicates her tendency to construct her meanings and definitions personally. This point supports the theory that personality type is a strong factor reflected in people's behaviours, and it should be considered further in the future.

9.5.2 Institution (2)

The course coordinator's definition of creativity, "Because creating something new from not very much is a creative act. Tricky question. Being inventive with limitations because interiors have limitations attached to it physically. Its plan and its volume, creativity judged in terms of how those physical restrictions are dealt with. How would you acknowledge the significance and importance of find best human interactions with an interior space? So it is not simply creating the aesthetic dimension, but it also about human and experiential dimension."

Interestingly, in this institution student definitions of creativity were more varied. Four students reflected the educators' meaning of creativity in their own words and expressions. They were: Ag. G, Ea. G, St. G, and Li. G. whereas, the other three students, Ro. G, Vi. G, and Ma. G, reflected on their own understanding of the term. As discussed in institution one, there is a correspondence with their educator's definition stated above. Li. G. has used an excellent expression as "the balance between life and design". In terms of personality type, there was no clear pattern as in institution one. However there was a clear reflection of each personality type in the students' definitions and behaviours which will be discussed in detail in the following section.

9.5.3 Institution (3)

The course director of this institution defined creativity as “The process by which to turn an idea into something else. Ideas are easy to come by, but turning that into something else or something useful, that answer a question, offers an experience, or offers delight or function. Whether it’s decorative or structural, that process is pivotal. The idea to put things together which may seem disparate from which comes something new.

We’re not really in the business of saying either you’re creative or you’re not creative. cause I think that would be quite damaging frankly, to the student who may not be so sensitive to their environment. It’s kind of how to push that creative process. It’s how to push someone’s thinking. How to make someone more investigative, more useful as a designer. More sensitive to the visual. More sensitive to someone’s needs. Cause a good design is thoughtful design. It would be as problem solver as well. But sensitive to a whole series of different needs. So you can get into the space, you can imagine being in the space. That’s the kind of, that’s the mark of rather than being creative, in a sense.”

The data shows that there was a correspondence between the educator’s definition and student definitions of creativity. Six students (Lu.C, Be. C, Ji.C, Ta. C, An.C, and Mi.C) out of nine used the exact expressions the educator E.T.1 used in order to define their own definitions of creativity, by using terms such as: “process of thinking,” “questioning,” “turning a thing into something,” “solving problems through questioning, that lead to generating practical or beneficial products.” Whereas two students Ma.C and Ri.C shared the same concept of being different and out of ordinary. They also shared the same personality type ESTJ, which is interesting. One student gave a unique definition that did not mirror the educator’s definition. Ed.C defined creativity as “a stubborn woman, if you give her a lot of ‘no’s’ she will be upset and she won’t answer you anymore.” This last student has ISFJ personality type which tends to prefer personal space to digest information they’ve take in through the senses to make up their minds.

9.6 Summary and Conclusion

The definitions of creativity from student perspectives were categorised under five themes; *person*, *process*, *product*, *users of a press*, and *open definition*. They have been discussed independently in relation to Sir Ken Robinson's definition and explanation of creativity. Following that, these categories have been discussed in relation to personality types, then in relation to the Six Thinking Hats, and finally in relation to the educators' definitions of creativity. Each discussion has shown interesting findings and potential correspondences. Thus, the following section will analyse the previous discussions integrated to generate links across all of them. The categories that emerged from the data will represent the sub-headings of the conclusion.

The Creative Person:

Twelve students defined creativity as a *person*, nine of them have Introversion preferences in their personality type, and they placed the Red Hat with the Green Hat. This combination of characteristics indicates which students chose which definition, as they generally tended to think individually, imaging in their own world, following their hearts to make decisions and create. Moreover, they were divided equally over the three institutions, which does not suggest an influence of educator definitions, but reflect on their lesser tendency to be influenced by outer influences.

The Creative Product:

Eleven students defined creativity as a *product*, seven of them were Sensing, and they placed the Yellow or Black hat with the Green hat. This combination of personality traits shows how sensing students have more tendency to be influenced by outer motivations. This leads them to put Yellow (possibilities and options) or Black (problems and issues) hats with the green hat, which are the motivators for them. Moreover, five of the students in the second institution and four in the third institution, had educators who emphasised the importance of creating a visual. These visuals can take any form that fulfil an intended task.

The Creative Process:

Thirteen students defined creativity as a *process* (thinking or physical), eleven of them have Sensing preference in their personality type, and they mostly placed Black, Blue, or Yellow hats with the Green hat. These combinations show the tendency of students to follow a clear process that will lead to a desired outcome. Five students in both the first and third institutions perceived creativity as a *process*, which related to their educators' definitions.

The Users centred Creative Press:

Seven students defined creativity as a *press from the user point of view*, four of them were Introversion Sensing, and mostly put the Red or White hat with the Green hat. This combination justifies the tendency of students to embrace the users' needs and desires and provide it (*press*). This also explains why they use the Red hat to engage with users' feelings and are inspired to design a place. Interestingly, five of them were from institution (2) where the educator definition mainly emphasised this concept. This correspondence shows the influence of educators when it comes in a line with student preferences.

The Open Creativity:

Five students defined creativity as an *open concept*, all of them were Sensing and four were Sensing Judging. They put a White or Yellow hat with the Green Hat. This combination explains how some students were challenged to define creativity, leading them to search for a convincing meaning in the field using white or yellow thinking hats. Moreover, three of them were in institution (3) where the educator emphasised personal questioning of the process, which seemed to suggest an endless ambiguity. None of the students were from institution (2) where the educator had a clear definition emphasising the user-based designed place.

To sum up, each individual student had a personal definition of creativity that corresponded to their personality type, thinking style, and the influences of the educator. These correspondences should be considered further within the pedagogical domain, to understand in more depth how these definitions of creativity were constructed and how they can be developed. A full discussion chapter will provide this analysis, after providing

a second body of literature on creativity based on the categories that emerged from the data. This literature review aims to link this research with the broader body of knowledge, as a rigorous step in developing interior design knowledge.

Finally, this chapter presented how interior design students defined creativity within the domain, using implicit and explicit information. Students constructed conceptual meanings of creativity within the pedagogical environment, by grounding a theory that the five categories defining creativity strongly related to personality type, thinking process, and mirroring theory. This will be discussed further in the following section.

Chapter 10: A Discussion of Individual Students from Five Different Perspectives

10.1 Introduction

This chapter discusses and analyses the interviews of individual students' from five different perspectives: the definition of creativity, personality type code, verification of supplementary questions, verification of personal observation, and thinking style order. The student discussion will provide a lengthy, holistic narrative of individual students and their MBTI personality type. This section will also discuss five aspects of the student personality types: verification of personality attitudes and behaviours, observations of student actions and language in the studio, thinking process, and definitions of creativity. This section will discuss any correlations between these factors to reveal relationships, which aims to reveal any in depth correspondence between these aspects.

As shown in the previous chapter, students were organised by personality type resulting from MBTI test. A student from each personality type will be discussed as a demonstration of the analysis process, and the rest of the student data will be included in the appendix for further reading. Each student will be discussed individually in five aspects, as shown in figure 12, creating five discussion parts:

1. A discussion of MBTI personality type resulting from the test conducted in the interview, supported by quotes from students' answers to the MBTI test questions.
2. The first verification process, which is the support quotations from their answers to the supplementary questions.
3. The second verification process: the individual observations of students' attitudes and behaviours in the studio.
4. The analysis of the Six Thinking Hats activity in relation to the thinking style through designing process. As stated in the methodology chapter, the last question in the students' interview is to consider the concepts represented by the Six Thinking Hats and put them in a sequential order. The order of these Hats reflects the order of the student's thinking style or process in accomplishing projects.

5. The personal definition of the creativity term, in relation to the personality type and thinking style.

However, for quick reading an illustrated summary report is provided to give a sense of the student analysis and the reflection of their personality type on their behaviours and attitudes.

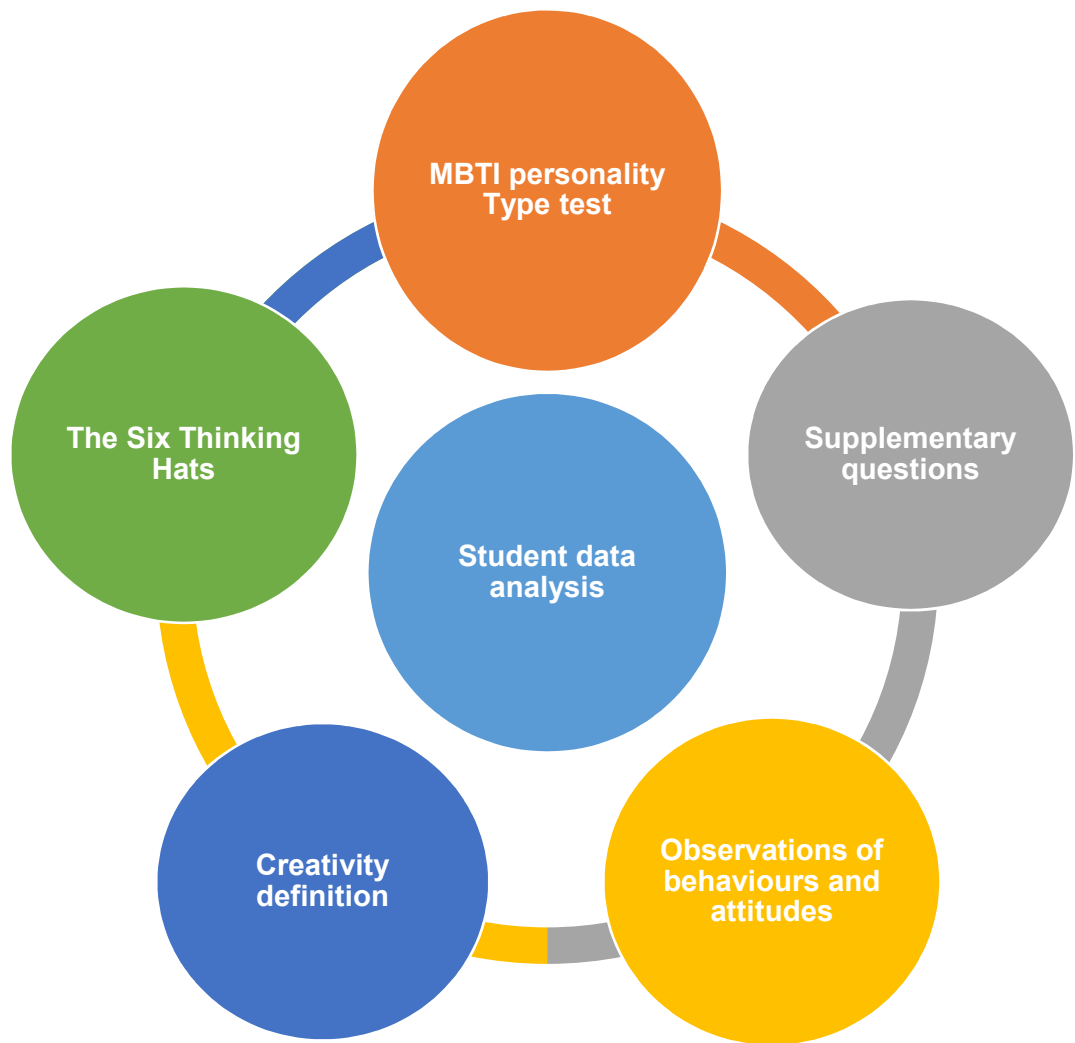


Figure 18: a diagram of the five types of data will be included in the analysis process of the students under their personality types.

10.2 Brief personal analysis of student's interviews (Full analysis in Appendix 13):

The detail analysis of students' data is important to link all information together creating a coherent narrative. Each student was discussed from five perspectives; MBTI test results, supplementary questions, six thinking hats, Creativity definition, and observation.

However, it might be lengthy and complicated to read the full analysis in detail. Therefore, this report summarises the main points in each case and provides the essence of similarities and differences between students in relation to their personality types. There are eleven out of sixteen personality types included among all students. The conclusion links all points' together and provides an individual student case. Interestingly, the preferences reflected in the behaviours and attitudes in student personalities, proving the strong relationship between both factors.

The first student is Gr. L, and her personality type code from MBTI test is INFP. Her introversion preference (I) is reflected in her tendency to work alone and independently, with her work centralised around her inner self. The INtuitive preference (N) is reflected in her tendency to take risks and follow her intuition rather than following the facts gathered through her senses. Her Feeling preference (F) is reflected in her statement that she does not like to hurt others by negative comments or criticism. The final code is the Perceiving preference (P) which is reflected in her challenge to submit a project on time, working steadily to follow a structure. For further information and full evidence see page (503).

The second student is Mi. C and her personality type is ESFJ. Her Extraversion preference (E) is reflected in her tendency to work in the studio as it encourages her to work more. Her Sensing preference (S) is reflected in her tendency to be hands-on in visualise her ideas as part of the design-thinking and design-processing. Her Feeling preference (F) is reflected in her priorities and values of care, help, and support for others. She does not want to hurt others' feelings in whatever situation. The last preference is Judging (J) which is reflected in her tendency to be organised and to work towards the tasks required to achieve a clear goal. For further details about Mi.C see page (512).

The third student is Ca.L and his personality type is ESTJ. His Extraversion preference (E) is reflected in his tendency to socialise and work in the studio, having active friendships with his peers and tutors. The Sensing preference (S) is reflected in his tendency and passion for visualising his ideas and communicating his designs visually using CAD drawing, hand drawing, and modelling in early stages of the designing process. His Thinking preference (T) is reflected in his rational approach to ensure his design ideas meet the requirements in the brief, and his attitudes of being 'on the safe side,' following a structure. Finally, his Judging preference (J) is reflected in his planned tasks and organised time slots to accomplish the design requirements, following a structure. He even wrote a list of the required tasks. For more details see page (519).

The fourth student is Fr.L and her personality type is ESTP. The Extraversion preference (E) is reflected in her tendency to socialise with her peers in the studio, rather than being alone. Her Sensing preference (S) is reflected in her tendency to focus on visual details and the accuracy of CAD drawings, and the clean lines of the visuals. Her Thinking preference (T) is reflected in her evaluations dependent on logic, while accepting and taking criticism more deliberately. The Perceiving preference (P) is reflected in her tendency to work spontaneously, with a low tendency to follow structure. For further information see page (525) in the appendices.

The fifth student is Lu.C and her personality type is INFJ. The Introversion preference (I) is reflected in her tendency to think thoroughly and solely about projects before she talks or brainstorms about it. Her INTuition preference (N) is reflected in her attitude of decision making, as she follows her instinctive feelings rather than conscious reasonings. Her Feeling preference (F) is reflected in her interactions with peers and tutors, as she avoids any situation that might hurt someone or be critical of others' work. Finally, her Judging preference (J) is reflected in her working attitude and skills for managing her time, as she follows the timetable of submitting tasks on time because she likes to finish her projects to see her design and see ideas in reality. For further information see page (530).

The sixth student is Ma.G and her personality type is INTP. Her introversion preference (I) is reflected in her tendency to work alone at home most of the time, she does not like to work in the studio, also in her cautious attitude when she does work in the studio. Her INTiution preference (N) is reflected in her designing process as she likes to imagine her ideas and try to predict people's reactions towards her ideas. Her Thinking preference (T) is reflected in her attitude for accepting and giving criticism to develop the design ideas, but not highly considering people's emotions. Her Perceiving preference (P) is reflected in her challenge to manage her time and her preference to not follow a time plan to finish her design. For further details about her personality analysis, see page (535).

The seventh student is Ro.G and her personality type is ISTP. Her Introversion preference (I) is reflected in her tendency to work alone on the mezzanine level quietly, individually, and silently. Her Sensing preference (S) is reflected in her obsession with visuals and drawings as the best communication strategy. Her Thinking preference (T) is reflected in her designing process, as her attitude to focus on working hard and submit the project on time, despite her tendency to not follow a structure or time plan, reflecting her Perceiving preference (P). The combination of the Thinking and Perceiving preferences shows a process to realise the issues and finding a strategy to overcome them. For a detailed analysis about this student see page (540) in the appendices.

The eighth student is An.C and her personality type is ISFJ. Her Introversion preference (I) is reflected in choices to work at home mostly, and have a work place ready at home. Her Sensing preference (S) is reflected in her tendency to draw, sketch, and model her ideas more than talking about them. She starts to produce these visuals as a first step in design thinking. Her Feeling preference (F) is reflected in her ability to imagine the ambiance of a place and how people would feel in certain places, which indicates sensitivity to surroundings. Her Judging preference (J) is reflected in her ability to work following a structure and creating a timeline to progress in her design process. Full discription in page (545).

The ninth student is Ji.C and her personality type is ISTJ. Her Introversion preference (I) is reflected in her choice to work on her projects alone at home where she has a quite home office and all equipment in one place. Her Sensing preference (S) is reflected in her high consideration of details, more than the general idea, and ensuring the accuracy of the little details. Her Thinking preference (T) is reflected in her criticality in justifying her decision-making process and logical reasoning to achieve clear tasks. Her Judging preference (J) is reflected in her strong tendency to follow a structure plan and with clear steps until she finishes and submits her project. Full description in page (550).

The tenth student is Ag.G and her personality type is ENFP. Her Extraversion preference (E) is reflected in her socialising skills, abilities in the studio, and her outgoing attitude with her peers. Her INTuition preference (N) is reflected in her designing process as she wonders around until she has found inspiration, then she works non-stop until she finishes. Her Feeling preference (F) is reflected in her friendly and caring attitude with her peers and tutors, as she is careful in giving feedback to others. Her Perceiving preference (P) is reflected in her tendency to follow her mood and motivation, not working to a time plan or structure. Full data in page (555).

The eleventh student is St.G and his personality type is ENTJ. His Extraversion preference (E) is reflected in his outgoing and socialising attitude with peers in the studio, as he prefers to work mostly in the studio discussing his ideas and design suggestions openly (thinking out loud). His INTuitive preference (N) is reflected in his designing process, as he starts by reading the brief to get the sense of the desired place. He does not let the project brief restrict his ideas or narrow down the possibilities, he follows his instinctive feelings about the place. His Thinking preference (T) is reflected in his auditing process, adding a layer of practicality to his intuitive ideas to achieve a logical thoughtful standard for his design. Finally, his Judging preference (J) is reflected in his tendency to plan his designing steps and provide a structure plan to follow systematically, see page (560).

10.3 Chapter Conclusion

As this study investigated creativity in interior design education from conceptual and practical perspectives in the UK. It attempted to reveal the significant factors related to creativity that could help educators in their teaching practices and improve learning outcomes.

This chapter has discussed the correspondence between the five aspects of the MBTI personality type; the first verification process using the supplementary questions; the second verification process by means of the individual observations of student's attitudes and behaviours in the studio; the analysis of the Six Thinking Hats activity; and finally, their personal definitions of creativity.

The findings from this chapter should be considered the spine of this research. As it presented the link between the five variables stated above and students' creativity. Each student's conclusion confirmed the clear reflection of the implicit thoughts on the explicit behaviours, and vice versa. It presented the behaviours in a readable manner that helped me to understand where each students' behaviour comes from. This is considered as crucial evidence that educators have a greater chance to understand student personalities and teach them individually using personalised strategies, as students have different abilities and personal process in interacting, socialising, and responding. Thus, more awareness is needed to provide a clear and helpful strategy to help educators deal with students. Therefore, using personality type and thinking style as key factors in a personalised teaching strategy is the foundation of a new pedagogical strategy. This research emphasises the reliability and applicability of these findings, and provides the cornerstone of the constructed tool or strategy, which will be demonstrated in the next chapter.

Chapter 11: Interior Design Pedagogical Themes

11.1 Introduction

This chapter provides the secondary finding themes that emerged from the analysis in the area of interior design pedagogy. The interior design pedagogy discussion will cover three themes that emerged from the data: Computer Aided Digitals (CAD), assessment and evaluation and the difference between success and creativity.

11.2 Visualising Through Drawing, CAD or Modelling

Visualisation is a significant theme in interior design pedagogy, as it is the fundamental tool to approach ideas and translate them into our tangible world (Tovey, 2015). However, there are clear individual differences among students as to which visuals they would prefer. Moreover, there are different perceptions of what drawings mean to them.

The previous discussions demonstrated a strong correspondence between the type and process of visualising, the personality type, and thinking styles. For example, students with a Sensing Thinking personality type prefer using visuals in the early stages of their designing process. As Ca.L and St.G. stated, visualising their ideas help them to understand, criticise, and develop their designs. Usually, they prefer the CAD software as it presents a virtual reality to their ideas. Whereas students with INTuitive Feeling preference prefer to keep the visualisation process to the end after they finalise their design ideas and think about it thoroughly. For example, Lu.C and Gr.L, explained that visualising their ideas by CAD or modelling came as a result of their designing and refining process.

This finding justified the correspondence between visualising and personality type, as students visualised their design, some preferring to start with that process and some students preferring to leave it to the end, for their own reasons. The difference in timing for producing these design visuals was due to different thinking processes, not carelessness or productivity issues. Therefore, educators should consider these individual differences in their students' efforts to understand, develop, and respond to design projects. This will

improve the quality of communication and relationships between students and educators, which will increase the level of flexibility and efficiency in teaching strategies.

Another finding related to visualisation, is CAD drawing. It is undeniable that learning CAD skills has become a fundamental component in all interior design programs (Curry, Shroyer, and Gentry, 1993). This importance is due to the professional demand from the market on education institutions to develop students (or designers) with CAD skills, to communicate their ideas clearly with clients, constructors, workers, etc.

However, at an educational level, some students, particularly those holding INtuitive and Perceiving preferences in their personality types, experience difficulty in relation to learning CAD software. Some students are frustrated by learning CAD, as they think it is not flexible enough to fit their ideas. The issue they stated is that they lose design quality and fertile ideas because they cannot not apply them on CAD. One student took the risk and decided to not do her design on CAD at all, instead she did a simple model. She impressed her educators and peers with her ideas and ranked one of the best designs, however she received two critical feedback comments, one of which was for not having a CAD perspective. She explained that she tried to do her idea on CAD but she could not, despite the help she received in the studio, so the night before submission she created a model and as a result needed an extra half day to submit.

Whereas, some students (holding Sensing Judging personality preferences) find it easy to learn and use CAD, as they feel impressed when they see the final results. Students emphasised the sense of pride when they produce attractive visuals that impress others, never expecting to produce such visuals. Technically, these students believed that CAD software made their job easier in drawing, as they produced neat, crisp, and clear final drawings. Whereas, hand drawing frustrated them and did not gave them the same high quality results.

The findings proved that CAD is a fundamental skill student's will counter, and educators must encourage them to learn it and use it to communicate their design ideas properly. The issue here is that not all students responded positively to learning CAD, only certain

types of personalities responded well, while the others struggled. The crucial point educators should ensure is that using this software does not hinder student creativity while using CAD to develop the quality of visuals and the design of spaces. Therefore, understanding students different personalities and personalising pedagogical practices that help them to develop their CAD skills, seems a potential for pedagogical development.

11.3 Grades and Assessment

Despite the fact that this research does not focus on assessment or grades, the student findings drifted in this direction. Thus, this section documents an important secondary finding and result, which would be essential for other studies. Moreover, depending on the findings discussed earlier related to thinking styles, a suggestion of transforming the assessment strategy has been provided.

In the interviews, some students believed that the assessment process in interior design has many problems. They stated that educators' assessments are highly subjective and there are no clear criteria to ensure fairness and avoid subjective bias. Even the different perceptions of creativity has a negative impact on this aspect, as educators also have their own implicit meaning of creativity. Some students indicated that their focus turned to understanding their educators' perceptions and meanings of creativity, in order to provide a standard of work to satisfy their educator. Which led them to ignore their own definition of creativity, as they feel it was not preferable to their educator and it could not guarantee a high grade.

The critical fact that educators have the power to give grades makes students seek satisfaction from their educators more than developing their own preferences. Through the learning process this can cause stress for students and lead them to be externally responsive rather than thinking of what they personally desire, as Ro.G stated.

From the educators' perspectives, some students label themselves or their ideas as 'creative', when in fact they do not show actual creative processes or values. This

terminological conflict has led to practical conflict in the pedagogical domain. According to Sir Ken Robinson, explaining why people obsessed with educational performance and outcomes, said “it stamps us with an impression of ourselves that is hard to remove.” Therefore, the problem of subjectivity in assessment led to double frustration for students who did not know if they received a lower mark because they did not get it right, or because educators did not understand them. Thus, this point highlights that the current assessment and evaluation processes in interior design pedagogy need further consideration.

From this point, along with the previous findings, I developed a new assessment model as shown in the figure (14) that suits interior design pedagogy in the twenty first century. It does seem as a revolution on the current assessment strategy, but it gives personal development priority within the pedagogical dynamic. It also emphasises the balance of equality and individuality between students.

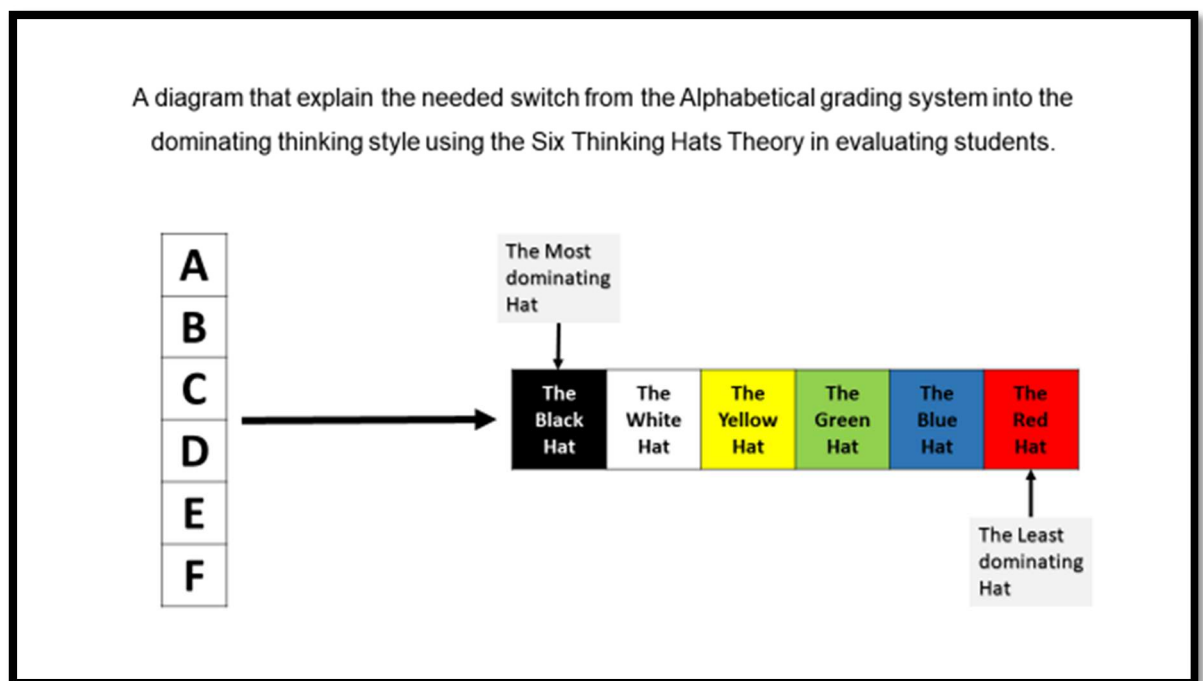


Figure 19: a diagram of the suggested transformation in the assessment strategy to shift from top-bottom hierarchy grading system to a more equal spectrum that depends on the Six Thinking Hats. The colours of the hats in this example were chosen randomly. The first square on the left is the thinking style that dominates a student's thinking process. The last square on the right represents the least dominating thinking style by the student.

The diagram suggests a change from the alphabetical grading hierarchy to an egalitarian vertical spectrum using the Six Thinking Hats. As shown in the diagram, on the left, there are a possibility of six grades, and students all aim for the highest possible. This is a stressful process that creates grade-focused students, who are not, therefore, creative-focused students. Moreover, there is an implicit cultural meaning linked with each grade. For example, an A student is the best student, and an F is the worst student, no matter what other good things they have done. As Sir Ken Robinson stated “Current approaches to education and training are hobbled by assumptions about intelligence and creativity that have squandered the talent and stifled the creative confidence of untold number of peoples. This waste stems partly from an obsession with certain types of academic ability and from a preoccupation with standardized testing” (2011 p.8). Although, art and design assessment strategies and criteria have been developed and have attracted a considerable amount of research (Orr, 2005; 2007), still there is a room for more development in disciplinary assessment strategy. Therefore, I think more equality in considering students’ talents, skills, abilities, preferences and creative potential is necessary.

11.4 The Difference between the Creative Student and the Successful Student

There are students who prefer to stick to the brief and there are those who escape the brief and seek freedom, and there is variety in between. Successful students were those who really wanted to stick to the brief, meet the requirements, and get high grades. Creative student were those seeking freedom from the brief to generate different outcomes, and get positive rewards of self-satisfaction, educator satisfaction, and high grades.

For example, Gr. L from institution one explained her personal thinking process in accomplishing a design project. In the first step, she stated: “I read the brief, because that what gives you marks. Then, I look for what can I get away with, so I don’t just want to do things like the book. I want to do things differently.” My interpretation of this is that this thinking approach indicates her desire to think outside the box and deliver unexpected,

different or unusual ideas or designs. Her tutors stated that her ideas and projects are always unique and different from her peers. She is always ready to take a risk and follow her intuitive imagination, rather than follow logical systematic thinking.

On the other hand, student Vi. G stated in her thinking style description: "I try to read the brief and stick to it. That's the most important thing I see". Her statement indicates her desire to be safe and follow the structure, which means her preference is to fulfil the requirements and think inside the box. Her work meets the average level of design; her ideas have been seen before, but she successfully meets all the requirements and tasks required for the project.

My interpretation links these differences to personality type. Gr.L Is an INtuitive Feeling (NF) person, which explains her preference for thinking inside her head and following her intuition, whereas Vi.G is Introversion Feeling (IF) person which explains her inner thoughts and feeling, but her Sensing Judging (SJ) preferences suggest she follows her senses as a guide to making decisions.

11.5 Conclusion

This chapter has collected the three significant themes related to interior design pedagogy, which are: visualisation, assessment, and differentiating between students' success and creativity. These themes show correspondence with student personality types and thinking styles. From my perspective, these subjects need further study and consideration within this context.

Visualisation is an important element in interior design pedagogy, however it is a complex notion that should be considered in planning teaching strategies. As some students perceive it as a process of thinking, others perceived it as a final product of the designing process.

Assessment strategies in the interior design domain currently follow the alphabetical hierarchy from A to F. The issue with this evaluation strategy in a field such as interior design, is that there is no objective assessment to follow as a correction model. Educators

evaluate students subjectively, thus their creativity is at risk of being appreciated or not by educators. Some students follow their educators' path unquestioningly in order to graduate and get the awards, where others challenge themselves to develop their creative potential. The findings show that these differences strongly related to personality type, thus the question is, are educators aware of these differences among their students? How can educators decide the creativity type of each student? What if educator and student have conflicting ideas of creativity? Is there any criteria or strategy to overcome these issues? The recommended pedagogical strategy in the following section aims to fulfil this gap.

Finally, the discussion that differentiates a successful student from a creative student brought attention to a critical issue. If educators assess students depending on their personal opinions and tastes, students risk losing their own personal touch. If educators do not pay enough attention to the boundary between developing and demolishing students' opinions, it will lead to hindering the creative abilities among students.

Therefore, educators should develop effective communication with students to understand them and their personalities. This strategy would help educators to choose their pedagogical practices more effectively in an insightful manner.

Chapter 12: Contribution to Knowledge and Conclusion

12.1 Introduction

This chapter presents the contribution to knowledge from the findings which are: a theory and a pedagogical model. The Grounded Theory of studio and creativity constructed from the data is the foundation of the theoretical contribution to knowledge. Then, the pedagogical model based on the constructed theory sets a foundation for pedagogical development in the field of interior design. A practical guide for educators has been developed on the basis of this theoretical model, to support the pedagogical practice in interior design studios. This practical implication, based on the grounded theory from the data, should help educators to foster students' creativity.

Second, a full explanation of the recommended guide will be discussed with an application strategy. It will present visually what educators can expect to have, and how to construct this guidance tool based on the student cohort they have. By the end of this section a summary of the different teaching strategies inspired by David Hodgson's book will have been included. Finally, the thesis conclusion summarises the research and extracts the main ideas from it.

12.2 The Contribution to Knowledge

This research aimed to develop interior design pedagogy that can foster students' creativity. From the Conclusion in the findings chapter, two significant factors show correspondence with students' personal definitions of creativity: personality type and thinking style. Thus, educational strategies that consider these two factors will help educators to achieve this aim practically and meet this primary objective.

As shown in the findings chapter, each student has a MBTI personality code that reflects her/his attitude, approach to using the studio, teamwork ability, time management skills, and their definition of creativity. Which means, educators can predict the personality type from the explicit behaviours and check their predictions by doing the test. This process will increase educators' awareness of their students' personality traits and characteristics, which will improve their communication. In addition to this, students who have similar

personality type codes have relatively similar thinking styles which is reflected in their Six Thinking Hats activity. Although educator definitions and strategies show partial influence, it was not investigated as it is an external factor, not an individual implicit factor for students.

Furthermore, the findings indicated that creativity was defined differently from students' perspectives as *person*, *product*, *process*, *press for user*, and *openly*. Which also related to their personality type and thinking process. These findings were grounded from the data constructing the theoretical foundation of "Shaheen Theory" which states the relation between personality type and thinking style in terms of creativity fostering, the statement of the theory as following:

Shaheen Theory

Personality type and thinking styles show a substantial correspondence to students' conceptual and practical beliefs and attitudes regarding creativity in interior design. Educators' definitions have a partial influence on students' perceptions, actions, and attitudes. Thus, to develop interior design pedagogy, future strategies should be personalised using these two factors. A pedagogical strategy tailored to fit student's individuality will help educators to foster students' creativity.

Creativity in these five different forms were evident in the domain of interior design pedagogy. What is substantial is the correspondence between definitions of creativity and personality type. The thinking process, and the practical implications of that, correspond to each other and to the personality type, which is reflected in the creativity definition of students.

For example, INFP students' show a high tendency to be imaginative, daydreamers, living in their inner world, with a high tendency to generate original ideas, which is essential for creativity. They share the same approach to the studio. They prefer to work outside the studio as it is a distracting place for their imaginations, and it challenges their flawless thinking process. They also share their preference for working alone, not in teams. If they

are involved in teamwork, they would avoid giving or taking criticism as much possible. They even share the same time management ability, which they stated frankly as having low abilities in managing time. They perceive deadlines as a cutting wall to their beautiful imaginative mood, pulling them into a reality they not ready to face. Consequently, they defined creativity as “a person” who enjoys special personal qualities. This is reflected in how their implicit meanings influence their own personal creative abilities. Thus, this research has proved that personality type and thinking style are two crucial factors related to creativity and should be given more attention in the educational domain.

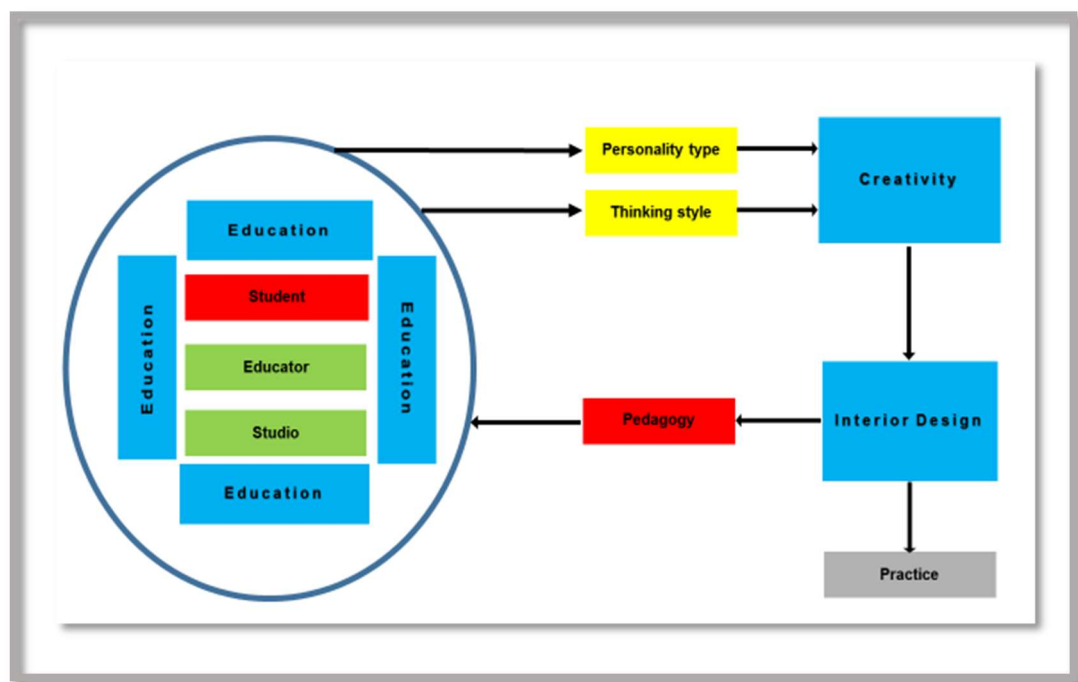


Figure 20: visualising the contribution to knowledge placed in the conceptual framework replacing the research gap by the two factors grounded from the data: personality type and thinking style.

This grounded theory has helped me to develop a pedagogical model. It is widely agreed that interior design pedagogy is based on the studio paradigm (Tovey, 2015), where students watch, build and learn (Kolb, 1984). However, giving too much creative freedom or openness alone does not guarantee the learning outcomes, or creative fostering. The findings in the last section proved that some students work better in clear structured education, where others do not. For example, students who have **NF** preferences in their

personality type codes response much better to open ended tasks, as it allows them to follow their heart and use their naturally rich intuitive ability. On the other hand, students with **SJ** preferences in their personality type code stated that open ended tasks challenge them, and lead them to feel lost in ambiguity. They think logically, work following a plan, and are motivated by a clear task. Whereas, open ended tasks are a challenge for them limiting their ability to set a clear target to the solution.

Thus, I developed the following model to guide educators and students on how to interact effectively, and how educators can understand the individual abilities and preference of each student. The model also suggests an appropriate teaching and learning style to fit students individually. This is the main practical strategy resulting from this research to develop interior design pedagogy.

12.3 Constructing the Pedagogical Model based on Shaheen's Theory

The constructed pedagogical model is a guidance tool to help students and educators develop pedagogical practice and increase its efficiency. The main idea behind it is to collect two key pieces of data about each student, in the case of this research, personality type and thinking style, as shown in the diagram below. After that, choose and write a suitable teaching strategy that suits the student personality type and thinking style (in the last column in the diagram below). I recommend that educators test for personality type at the start of a program, in order to develop their understanding and responses to students' creative development. I suggest that educators will need two months or a maximum of one semester to understand students' personalities and build the model. From this research I would recommend Meyers-Briggs Type Indicators test as it has several courses and training sessions specialised for educators.

The first column includes the students' name or code, second is the MBTI personality code, third is the year of the evaluation, fourth the students' order of the Six Thinking Hats and fifth is the recommended teaching strategy depending on the contents of the previous two columns. The fifth column recommends teaching strategies derived from the two key texts used in the analysis, David Hodgson (2012) and Jane Kise (2014). These two texts

have been chosen as they are the latest developments in pedagogical strategy based on personality type. Certainly, educators can use their knowledge and experience to fill this column, but for novice educators it will be a helpful tool.

Moreover, educators can create one table that gathers all data for the whole student cohort. This can present the data more closely which helps in comparison and understanding differences and similarities between students. Appendix 12 is an example model constructed using the research sample. The flexibility of this model is an advantage; educators can show their creativity in teaching and adjust the table to fit their needs or perceptions. For example, they could add a column for recommending a specific teaching or learning strategy for each individual student or for changing in the creative process, etc.

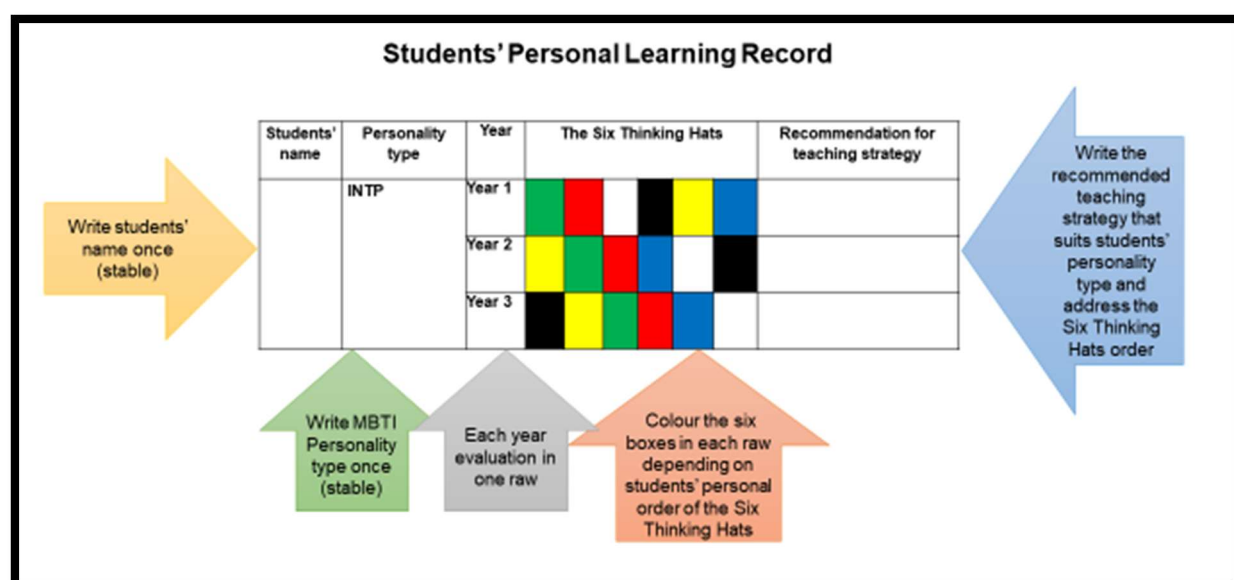


Figure 21: The constructed pedagogical model that gathers all needed information about a student in one sheet. Educators fill in a form for each student when they join the program, and update it every year until the student graduates. The first three columns are stable, and last two column are variable.

12.3.1 A Practical Guide to Using this Pedagogical Model

This section will explain how educators can apply this pedagogical strategy. As shown in Figure 22 this process constitutes six steps: familiarisation, interviewing, analysing, recommending, finalising and modifying. In relation to my research, the first three steps have been verified in the fieldwork and I did the recommend step in the analysis phase.

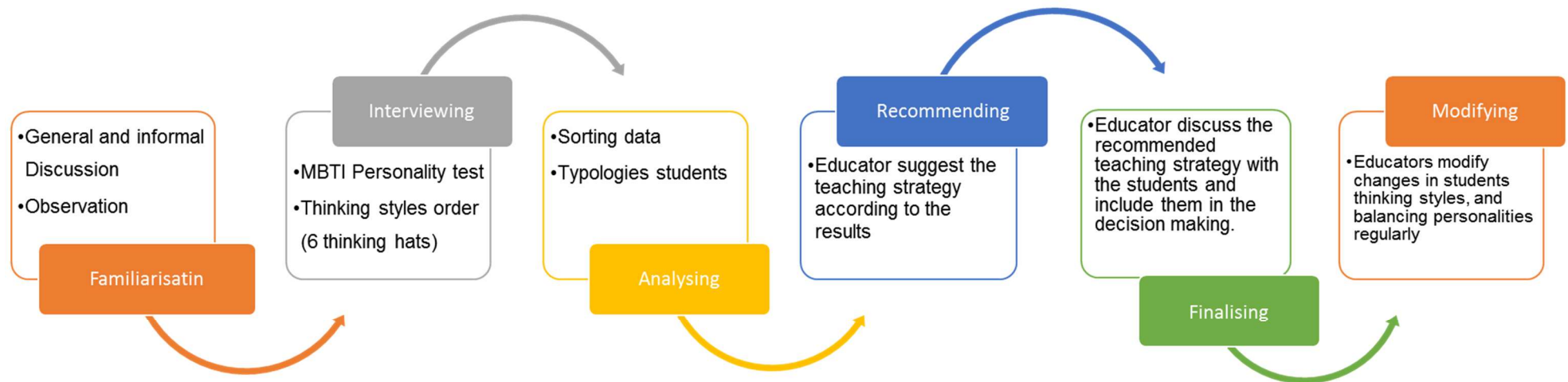
Unfortunately, I was not able to test the final two steps, which was due to a limitation to my research, which I will discuss later. The phases of building up the pedagogical model should take place in the first semester, except the last phase (modifying), which should be revisited as regularly as necessary to note down any development or change in students' performance.

The first phase is familiarisation, which is when educators and students get to know each other and start building their relationship. Educators could begin by discussing related subjects or the latest news in the field and ask students their opinions about this subject. After two to four weeks they would have a general understanding of their backgrounds, personalities, values and perceptions of design and other subjects. By the end of this phase students and educators will know each other and be able to work together in the studio. Certainly, it is expected that different students will act and behave differently and will have different attitudes. Here, the personality differences will be much clearer and at this moment the second step should begin. The importance of the observations and data from this phase is that it can support the data that will be gathered through personality tests and Six Thinking Hats activities in the next phase. Moreover, these signals work as indicators that help educators to know when they can move up to the next step.

The second phase is interviewing, which means collecting data through conducting the personality test and the Six Thinking Hats ordering activity. The personality test could be in the form of one-to-one interviews (as I did for this research) to give students enough space and time to reflect and speak. Another possibility is to do it as a class activity where students listen to educators' explanations about the personality test, then reflect on them in a specific form that will be provided for them. Also, educators could build a digital questionnaire to save time in this step.

This guidance tool collects and utilises the two main types of information about students (personality type and thinking style), in order to improve the awareness and communication between educators and students.

Figure 22: a diagram that show the process should be followed to utilise the constructed pedagogical model



However, there are three issues that could occur in a digital format: the loss of personal integration benefits from personal communication, the ability for any further explanations students could provide, and finally students could carry out the test with an immature attitude and just tick the boxes rather than thinking carefully and choosing accurately.

The Six Thinking Hats could be done in two ways as well. It could follow the personality test interview (as I did for this research). The other suggestion is to make it a group activity in the studio time, where students take the hats and physically order them. However, there is a risk of peer influence which could impact students' answers. After collecting all the required data from students, educators should start the third step.

The third phase is analysing the data and sorting it in the following model. To analyse personality type I adopted the guiding steps laid out by Jane Kise (2012) and David Hodgson (2014), both of whom provide the test with analysis of each personality and a personality code for each student. The Six Thinking Hats order can be combined with the personality type for each student as shown in the figure above, and could be used as Eduard De Bono (1990) used it.

The fourth phase is recommending a suitable teaching strategy that leads to a successful learning experience for each student, depending on students' personality type indicator. The first two books (Hodgson 2014, and Kise 2012) mentioned above provide hints for educators and an outline of the suitable teaching strategy for each personality type. Then, educators can expand their knowledge and skills to meet the students' requirements.

The fifth phase is the finalising and decision making phase. Educators will discuss the recommended teaching/learning strategy with each student. If they agree that the teaching strategy should be used, they can start applying it and set clear individual objectives to work towards. Regularly, educators should check the outcomes, which leads us to discuss the final phase.

The sixth phase is the modifying phase, which means developing students' records. The personality type will remain the same, however students could develop more balanced codes which minimise extreme preferences. For example, Perceiving students cannot work by following a structure, so if they developed this skill they would be moved to a balanced personality code. The Six Thinking Hats order could be changed depending on students' design processes. This phase will be a companion for the educators and students until they graduate.

This pedagogical model provides a clear, useful and practical guide for educators to teach students professionally. As it does not include or exclude any pedagogical practice, it is a starting point for educators to revolutionise the pedagogy of interior design to become more personalised and tailored to fit individual needs.

The individual pedagogical practice existed before, as discussed in the literature review. However, it has been discussed in the school context and shows several challenges and obstacles (Wallace, 2009), for example, challenges accrued in classrooms include disabled students, multicultural students or dyslexic students (Scruggs and Mastropieri, 2013). These issues take the debate in a different direction.

The main criticism for individual education theory is the difficulty for educators to apply it to all students, as it is time- and effort-consuming, besides which, the numbers of students have increased in the classroom, which make controlling the class and delivering the educational objective a crucial task.

But in the interior design studio, tutors already give personal attention to students on a one-on-one basis. Thus, this transition toward personality-guided pedagogy will give educators an insight in these individual sessions. The following section will recommend teaching strategies for each personality type based on David Hodgson's teaching recommendations.

12.3.2 Individual Teaching Strategies

The Recommended Teaching Strategies for (ESFJ)

The recommended points for teaching strategies in the table 25 will be briefly explained. The first point is about the environment of learning, in the case of this research it is the interior design studio. For **ESFJ** students the studio is a social hub where all students and educators engage in the learning activities together. Thus, it is important for educators to maintain positive and friendly relationship with students and others. This would encourage **ESFJ** to be more confident and motivated to work and to expose their creative ideas and inspiration.

The second point is the course plan (the project brief), which should be clear. In interior design (and in art and design in general) it cannot be so clear that it becomes restricting, as it should leave space for creativity to take place. The brief gives clear information of the place to be designed, i.e. the dimensions of the space, restrictions, a specific problem to handle, etc. Otherwise, tutors should be ready for lots of questions from ESFJ students and this is the best opportunity to encourage them to say what is on their minds. The criteria for assessment should be clear as well, as it guides this group in making important considerations while they are designing. This clarity can be the best motivation, especially if this assessment criteria has been visualised in a table or a diagram.

The third point educators should consider is to provide practical learning experiences in the studio without judging students. ESFJ students prefer learning by experiencing new objects and acquire new knowledge and skills through doing and handling physical items. In the interior design studio, sketching, life drawing and modelling all are part of the curriculum and it is interesting for **ESFJ** students as well. However, being assessed or judged could put them off as they do not want to listen to negative comments about their unexpected outcomes.

The fourth is the course structure, as students will need time to be active. They might come up with an idea of building something, testing something or playing with new

materials so they will need free time in the studio to experiment. Thus educators should take this into account and leave free time and space when they arrange the course plan for the semester.

The fifth point is the relationship between students and educators. Despite the tendency of **ESFJ** students to prefer teamwork, positive relationships are a crucial factor in maintaining this preference. Their friendly attitudes and care for others prevents them from working in aggressive environments or with aggressive individuals. A competitive environment also scares them and leads them to be silent or escape from the situation and work individually in peace. This might lead to less creative ideas and potential, as they will be afraid of taking any step further alone.

ESFJ students have a tendency to be conservative as they respect the traditions in their societies, therefore they could be risk averse at times. However, they can show creative potential if they get the encouragement to express their ideas and opinions. Then, if the creative idea does not receive any negative criticism from others, they will accept and be proud of it. In other words, the regard of others is the most important aspect for them in adopting or rejecting an idea.

MBTI recommended learning strategies for (ESTJ):

ESTJ is the most popular personality type. Usually, they prefer working in a practical and stable environment to help them focus better. They integrate well with a system dynamic and can work hard to complete the task. Being in the studio is a good active atmosphere, however, they should be encouraged to discuss, reflect, think and imagine as well.

They prefer having a direct and organised course plan, which fits perfectly with their tendency to think logically and be on the safe side. However, encouraging them to be more flexible and push them for fast change could improve their potential to be more open.

Furthermore, giving **ESTJ** responsibilities with clear boundaries is their preferred working plan. They can be restless until they finish all the tasks and keep themselves busy till the end, so it can help to encourage them to exceed the boundaries from time to time to widen their horizons.

As **ESTJ** are practical, they prefer honest feedback than false compliments. Accepting the feedback and improving their work is a result of being logical and realistic. However, it is good to encourage their tact and teach them the value of it, in order to maintain friendly relationships with others.

In fact, **ESTJ** enjoy working to time structure as much as possible. Usually, they are good at planning their days' and weeks' tasks and activities to meet deadlines and submission dates. They could be encouraged to be more flexible here, as urgent or sudden incidents happen in life and they need to develop the ability to react in these incidents.

MBTI Recommended Learning Strategies for (ESTP):

ESTP admire life experiences and have an energetic personality. Thus, let them explore and be adventures as much as possible in the studio. This will allow them to explore the world and come up with new ideas and they can be the energetic motor for the group. They appreciate senses and visuals, so showing them things practically is a better learning strategy than giving verbal instructions.

As they are fun-seekers, rewarding them by a treat or social activities can be highly appreciated and good motivation for **ESTP**. Moreover, they should be taught how to direct their energy, so encouraging them to try new experiences and to work with new materials will improve their learning.

It could be worth clarifying the general expectations and results, as a guideline, so they can meet the objectives they will be assessed on, which is the most important in their opinions.

MBTI Recommended Learning Strategies for (INFP):

INFP personas are the biggest daydreamers who want to stay in their shell, so respect their need for privacy and a quiet time to think and imagine. Therefore, encouraging their creativity and knowing how to make them tick is important to engage them with the course activities.

As they take criticism personally, they tend to neither give nor accept criticism. Thus, be careful when giving them feedback and try to be as positive as possible as this is what feeds their creativity. Help them to feel understood and accepted, and even if their ideas are not practical, encourage them to develop them further. By doing this, you are helping

them to develop their self-identity, which is a key factor in motivating them. Finally, helping **INFP** to learn how to organise themselves without losing their creativity and flexibility is one of the critical factors in teaching them.

MBTI Recommended Learning Strategies (INFJ)

INFJ are a rare personality type, who are thoughtful and visionary, which is why it is important to respect their need for privacy and quiet time to think. When they create something new or come up with an idea, show them appreciation and recognition of their efforts. When teaching **INFJ**, encourage them to be creative and help them to understand what makes people tick. As **INFJ** are very sensitive, be careful when you criticise them and be positive as much as possible. Help them to be understood and accepted, otherwise they might withdraw and not show up. Finally, let **INFJ** students organise their time themselves, whether for a short or long time as they need to have enough time to think and be inspired so they can work hard until they finish their task.

MBTI Recommended Learning Strategies for (INTP)

INTP personality type is known to be thoughtful and out of touch with reality. When teaching them, try to provide an encouraging and engaging curriculum, to keep them attached to the class or reality. Encouraging them to be curious and think about themselves is considered as an enjoyable activity.

Giving the **INTP** the authority to make decisions as much as possible, will give them the courage to be more involved in the learning process. Also, giving them complex theories to analyse might be their area of interest.

Moreover, give them problems to solve, as this will stimulate their imagination and drive them to invent creative solutions. Finally, you can construct a common interest with them to forge strong bonds. This kind of relationship will increase their feeling of attachment to student and teachers.

MBTI Recommended Learning Strategies for (ISTP):

ISTP is a strong and silent personality, who enjoy making decisions with high clarity and logic. It is necessary to provide personal space for them to think, understand and learn how the world works.

To quickly engage them with the subject, give them theoretical challenges to think about, which will drive their thinking process to solve the issue or find a meaning.

Moreover, it is good to balance clear objectives and responsibilities with a wide variety of choices of experimental learning. This combination will balance the **ISTP** Sensing Thinking against Introversion and Perceiving.

As an educator, it is worth finding common interests with **ISTP** to create strong bonds, which will strengthen the attachment between the student and the programme as a whole.

The MBTI Recommended Learning Strategies for (ISFJ):

ISFJ is the most self-effacing personality, quiet and soft. They are nurtured slowly and over a long period of time, which is why they need personal space. As educators, it is important to accept their natural reserve and quietness, without pushing them too hard.

ISFJ usually observe what is happening around them quietly and carefully, then they act confidently. Thus, they need to work in small groups and in a friendly working environment. They tend to do plenty of hands-on work, which is effective.

ISFJ prefer working in a structured manner, therefore offering fair and consistent rules leaves them with clarity in terms of planning.

Finally, rewarding **ISFJ** for good behaviour with more responsibility will motivate them to work more and do more.

MBTI Recommended Learning Strategies for (ISTJ):

As **ISTJ** is a quiet and serious personality, educators should respect their need for privacy and independence. As they tend to be self-controlled, they prefer to work individually and in their personal zone. Educators can encourage them to integrate with others by giving them responsibilities in their projects and the teamwork. This will help them learn that life is not black and white. Moreover, educators could teach **ISTJ** about tact and sensitivity, as tasks could be negotiated in favour of people's satisfaction.

Finally, it is essential for **ISTJ** to see that their educators share a schedule and stick to it. However, educators can help the students to develop a routine and follow it flexibly and smoothly.

MBTI Recommended Learning Strategies for (ENFP):

ENFP are fun, loud and talkative, who are able to imagine creatively if they have been encouraged to do so. Group discussion and people's opinions can influence **ENFP**'s ideas, thus educators should encourage them to exceed boundaries and limitations.

In the studio, let **ENFP** think out loud without fear of being judged or assessed, as their ideas could be irrational at first before being developed.

Do not win all arguments; the most important thing is providing a friendly and caring environment to work in.

Finally, **ENFP** are spontaneous people who like to work openly, so try not to quash their spontaneous preferences while developing their time management skills.

MBTI Recommended Learning Strategies for (ENTJ)

As **ENTJ** are natural entrepreneurs, they are ready to be and do whatever will lead them to success, so be direct and honest with them.

Be organised and logical, as **ENTJ** respect plans and structure, especially when there is no strong reason to not follow it. Show them their responsibilities with clear boundaries so as to not take too much control over the situation.

To encourage **ENTJ** to work as part of a group, encourage them to show their best and take the lead. Share your plan and stick to it as much as possible, as **ENTJ** are goal-settings and finishers.

Moreover, educators could teach **ENTJ** about tact and sensitivity, as tasks could be negotiated in favour of people's satisfaction.

The Thesis Conclusion

This research sought to develop interior design pedagogical practice in the studio, in order to foster students' creativity. It started by navigating the research path using Grounded Theory to identify and implement the related factors and subjects from the wide literature available. The literature of the thesis began by considering the following areas in the British context: art and design education including studio strategies; important theorists who developed the basis for art and design education in the twentieth century; the establishment of the interior design profession in the early part of the twentieth century; and the beginning of interior design programs in Higher Education in 1960s. These discussions provided an essential overview of the main concepts and theories existing in the domain. Moreover, it has illustrated the disciplinary divergences that have led to the interdisciplinary practice we have today across all subjects and fields.

A section reviewing the literature of creativity in the educational and psychological sectors was also discussed. This discussion was crucial to include in the thesis, as it revealed valid theories and important knowledge on creativity. My theory is a constructed one, meaning I didn't start work from a hypothesis. The findings in my research guided the results. Through reviewing the existing literature, I was able to start piecing together a picture of how my theory could take shape.

From this literature, I reached five assumptions that underpinned my research method. They are:

- 1- Interior Design education in the UK is part of art and design education, and the studio is the main space where the learning process takes place (as discussed in section 2).

- 2- Interior design educational theories were built upon the theories of Dewey, Kolb, and Schon (as discussed in section 3). These theorists supported a progressive education that encouraged the reflective experience and experimental learning of individuals, and which took social differences into consideration within the learning process.
- 3- Interior design, as a profession, is in between art and science, and balances between artistic intuition and scientific logic, which makes creativity an essential part of the profession (discussed in section 4).
- 4- Creativity could be nurtured if educators considered students individually, and a concept of typology of creativity existed (discussed in section 5).
- 5- Studies have proven a strong relationship between creativity and individual circumstances, personality type, and thinking style or process (discussed in details in section 5).

From these five assumption, I constructed my research methodology and methods. The qualitative methodology adopted helped investigations into perceptions and attitudes to creativity among students and lecturers of interior design. Employing Grounded Theory as a research approach was beneficial in understanding the context of interior design education, and how to improve nurturing student creativity by spotting the crucial factors that matter. The methods applied were semi-structured interviews and ethnographical observation of interior design studio activities in their normal settings. The field work started by visiting three interior design departments in three different universities across the UK. The interviews with students were divided into three sections: personal background questions, personality type questions including MBTI test questions, and a thinking style exercise. The educator interviews questioned their background, perceptions, and approaches adopted by each educator in teaching interior design.

The observations shed light on the studio dynamic, the social interactions between educators and students, and helped to understand the social context. These observations showed how student behaviours and attitudes are different and consequently these produce different creative actions. Moreover, it highlighted the differences among students in reacting to these social actions and variables, and illustrated the ways they responded differently to project briefs, educator feedback, and formal critique – or “crits”.

The interviews provided rich and substantive material to analyse and reflect on, and there were three main findings extracted from the data. The first finding was the conceptual understanding of creativity among students. They held one of five types of definitions of creativity: 1. the creative person who has a special quality of mind and imagination, 2. the creative product which is an impressive innovation, 3. the creative process, when presented in physical and cognitive forms, show unexpected transformation, 4. the creative press for users which specifies a quality of space described as creative from the users perspective, and 5. the open definition, which used words like “everything” and “anything,” while not mutually exclusive, students tended to hold one more prominently.

The second interesting finding was that personality type was the core factor underpinning student perceptions. Students believed creativity either to be an impersonal process, an innate trait, or a skill that can be learned depending on their personality type. This influenced the way students made decisions, approached time management, used the studio, researched their work, or presented their outcomes.

The third finding showed that thinking process was a significant factor as well, as it corresponded to the personality type and personal definition of creativity. Students who share the same personality type, have greatly similar thinking styles and

processes as shown in a similar arrangement of the Six Thinking Hats. Thinking process was the key factor that could be developed, especially if the development process considered personality types. This correspondence was the most significant finding that explained variations of attitudes, behaviours, and abilities among students.

My contribution to knowledge is *Shaheen's Theory*, which explains student personality types and thinking styles in relation to student creativity, and recommends personalised educational strategies. My recommendation is to use the MBTI personality test and the Six Thinking Hats exercise to build a pedagogical tool to develop creativity, by paying attention to student personality preferences and to communicate their thinking styles by using the thinking hats method. The recommended pedagogical model provides a practical strategy that can consider both factors in nurturing student creativity, alongside developing a study plan for the school term. Studio time will be more efficient when each student understand what to do, and the educators will understand better the reasons behind student actions and behaviours. Moreover, educators will be able to choose appropriate teaching strategies that are individually tailored for each student.

12.4.1 The Limitations of the Study

Limitations set the boundaries of any research, and for this research there were three main limitations. The first was the limited number of participating institutions. As mentioned above, each studio is unique, so having a larger number of institutions would have posed a real challenge for me to observe, both in terms of time and finances. For this research, three different institutions were visited, observed and investigated, amounting to three academic terms, which is one term longer than the usual period devoted to fieldwork in PhD research. Around £3000

was spent for these trips, including transportation, accommodation and living costs, which was a considerable budget for a student. Therefore, a larger research project with appropriate budget and longer timescale would be more efficient and beneficial.

The second limitation was the issue of taking students' grades and educators' assessments into account when evaluating teaching strategy. As part of the 1996 Data Protection Act, students' grades fall under 'confidential data' and should be protected. This point led to the omission of important evidence that would have proved what was at stake with the current student evaluation system. Therefore educators' opinions and evaluations about students was used only as a reference for myself.

The third limitation concerns choosing the method for collecting the necessary data, namely, implementing the psychological testing tools for understanding student creativity in relation to thinking, decision making, and the design process. As I do not have a background in psychology, this was a real challenge. However, these strategies have been applied before in the education field by non-specialist psychologists, with promising results. Thus, I was encouraged to take this step and expand my knowledge on this optimistic path. However, I would take courses in psychology or have a psychologist research partner in any future projects to circumvent obstacles and challenges in making decisions.

12.4.2 Future research:

There are several research ideas that come to mind after conducting this research. The first is to examine the constructed pedagogical model in a real case study for a full three-year programme, and publish a paper documenting the experience of using my model. The second would be to examine other psychological tests for personality types, comparing the results to investigate if other tests offer further

possibilities in presenting a practical model, and which direction should be taken to develop it. The third idea is to conduct the personality test for students and educators in the same program, to check if there is any additional value to be found by knowing the personality types of both sides of the pedagogical dynamic.

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ANGLIA RUSKIN UNIVERSITY

**FACULTY OF ARTS, LAW AND SOCIAL SCIENCES
CAMBRIDGE SCHOOL OF ART**

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A thesis in partial fulfilment of the requirements of
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Second part (Appendices)

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Appenhix (1)

A table summarise the main categories and theories in social sciences, and the application of these theories in the domain of interior design.

<i>Categories/Subcategories</i>	<i>Definition of Sample Theory</i>	<i>Application of Theory in Interior Design</i>
Behaviour (Human Factors, Evaluation, Post Occupancy Evaluation)	Arousal theory refers to a mental state aroused by an expressive work of art. One aspect of the arousal theory is the appropriate reaction to expression. The arousal theory maintains that the feeling aroused by an expressive work causes a belief as to what the work expresses (Matravers, 1998).	Arousal Theory (Berlyne) Arousal theory is applicable to interior environment preference. Arousal theory explains the biological process surrounding environmental preference, as well as culturally influences on those preferences. Interior designers working with diverse cultures can apply the arousal theory to understanding the various levels of complexity/visual stimulus among cultural groups (Ham, Guerin, & Scott, 2004).
Criticism	Post-Modern Theory Post-modernism stems from a recognition that reality is not simply mirrored in human understanding of it, but rather, is constructed as the mind tries to understand its own particular and personal reality. For	Post Modern Theory The application of post-modern theory within interior design is concerned with aesthetics, formal qualities, function, health and safety, and social/behavioural factors, as well as how designs and their meanings may empower or disempower certain

Categories/Subcategories	Definition of Sample Theory	Application of Theory in Interior Design
	<p>this reason, postmodernism is highly sceptical of explanations that claim to be valid for all groups, cultures, traditions or races, and instead focuses on the relative truths of each person.</p>	<p>groups or philosophies (Havenhand, 2002). Post modernism encompasses particularly the feminist critique of interior design. Post-modern studies explore the idea that the some interiors seem particularly designed for the 'active mother housekeeper.' The theory suggests that interior design can reinforce, subliminally or not, stereotypes, particularly those of the traditional role of a woman.</p>
Design (Colour/Colour, Research, Creativity/Creative Process, Lighting)	<p>Diffusion of Innovation Theory (Model) refers to diffusion as a multifaceted process by which an innovation is communicated through certain channels over time among the members of a social system (Montgomery, 1999). Diffusion theory has been applied to a broad range of concepts (evolutionary or developmental) in the social sciences, and typically refers to the</p>	<p>Diffusion of Innovation Theory (Model) The diffusion theory, particularly the diffusion of innovations, focuses on the adoption (acceptance) process of an innovation. Diffusion focuses on communication that ultimately targets the adoption of an innovation. The diffusion process is influenced by the product, the way in which information is communicated, and whether the innovation is rejected (Bender & Good, 2003).</p>

<i>Categories/Subcategories</i>	<i>Definition of Sample Theory</i>	<i>Application of Theory in Interior Design</i>
	spread of culture traits.	
Education/Academe (Graduate, Education, K–12, Pedagogy, Undergraduate, Education, Institutional Issues, Program, Development)	Kolb's Experiential Learning Style Theory describes learning as the holistic engagement of affective, perceptual, cognitive, and behavioural processes (Kolb, 1984).	Kolb's Experiential Learning Style Theory Kolb defined four different learning styles: diverger, assimilator, converger, and accommodator. These styles of learning define the various ways in which information is grasped and processed. Therefore, it is important that those in the interior design profession successfully learn and are able to transform concepts. By understanding learning styles most common to members of the interior design field, it can be determined how best to reach each style of learning with the concepts that need to be taught (Kolb, 1984).

<i>Categories/Subcategories</i>	<i>Definition of Sample Theory</i>	<i>Application of Theory in Interior Design</i>
Environment (Physical and Natural) (Energy, Environmental Control Systems, Sustainable Design)	<p>Norberg-Schulz Sense of Place theory refers to "...a totality made up of concrete things having material substance, shape, texture, and colour. Together these things determine an 'environmental character' which is the essence of place. In general, a place has such a character or 'atmosphere.' A place is therefore a qualitative, 'total' phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature" (Norberg-Schulz 1979, 8).</p>	<p>Norberg-Schulz Sense of Place was used to examine the significance of the Chinese Courtyard. The researcher argued that when users project an affective meaning onto a physical place they may create a "sense of place." Sense of place must have clear boundaries, fit with social logic and create a permanent connection between the physical and social roles (Wang, 2006).</p>
History (Adaptive Reuse, Decorative Arts, Historical Case Studies, Historic Preservation, Restoration)	<p>E. McClung Fleming Model to Study Material Culture Artefacts was developed to study early American decorative arts. There are four major steps (a) identification wherein a factual description is made of the object (b) evaluation wherein the object will be</p>	<p>E. McClung Fleming Model to Study Material Culture Artefacts is a method of studying material culture that was utilized to examine physical evidence (i.e. historic artefacts) created by African American craftsmen. Written documentation from the same time period was also examined to validate and situate the material</p>

Categories/Subcategories	Definition of Sample Theory	Application of Theory in Interior Design
	<p>compared to similar objects (c) cultural analysis wherein the object will be compared to aspects of the culture that produced it (d) interpretations wherein how the object relates to the values of the culture and the significance of the object will be assessed</p>	<p>culture findings (Carll & Blakemore, 1988).</p>
<p>Professional Practice (Installation, Licensing, Profession, Professional Development)</p>	<p>Porras and Robertson Model Field of Organizational Development includes four factors of importance in an organization: organizational arrangements, social factors, technology, physical setting. These comprise the organizational setting, which in turn affects individual behaviour, organizational outcomes, and individual development. An intervention made to an organization may influence all of these factors (Robertson & Seneviratne, 1995).</p>	<p>Porras and Robertson Model Field of Organizational Development represents that an organizational setting can influence individual development and organizational goals. It was used in combination with Sense of Place to understand how work setting influences motivation and job satisfaction (Miller, Erickson, & Yust, 2001).</p>

<i>Categories/Subcategories</i>	<i>Definition of Sample Theory</i>	<i>Application of Theory in Interior Design</i>
Specialty Design (Healthcare, Hospitality, Institutional, International/cultural, Restaurant, Special populations, Universal design)	Atchley's Continuity Theory suggests four areas that must be addressed by individuals as they age and retire: maintaining daily routines, using valued activities to create structure in daily life, identifying with a job by seeking continuity through diminished but continued involvement, (ex. consulting), maintaining the same level of social interactions after retirement (Kim & Feldman, 2000).	Atchley's Continuity Theory was used to explain the needs of older individuals especially the need to maintain routines. The researchers then discussed how this need may not be met in poorly designed nursing home environments where there is a lack of privacy for residents.

Table 1: a table summarising the main categories and theories in social sciences, and the application of these theories in the domain of interior design. Source: (Clemons, and Eckman, 2011 p. 39-40).

(2)

Interview information sheet (Students)

You are invited to take part in this research that titled:

“INVESTIGATING THE CREATIVE CONCEPTS AND PRACTICES IN INTERIOR DESIGN STUDIOS FROM THE STUDENTS’ PERSPECTIVE”.

The aim of the study is considering interior design students’ perspectives about their learning process, and how it affects their productivity and creativity.

The interview is investigating how you carry on through your project, and how you move on from the beginning to the end of your project. The questions will be varied between personal and professional questions as interior designer.

Participation in this study is totally voluntary, and you are under no obligation to take part. You are free to withdraw at any point prior to finishing the interview. All data collected will be kept confidential and used for research purposes only.

Please briefly examine the questions you will be asked before signing the consent form.

There are no trick questions in this interview. There are no right or wrong answers, as there is no evaluation or assessment by any mean for your work or your personal attitude. Your name or any identifying characteristics will not be available to anyone, other than my supervisor and me, at any point.

If you have any questions you may contact me on:

E-mail: XXX

Or

Mobile: XXX

Researcher: Roba Shaheen

Supervisor: Paul Marris

Interview information sheet (Educators)

You are invited to take part in this research that titled:

"INVESTIGATING THE CREATIVE CONCEPTS AND PRACTICES IN INTERIOR DESIGN STUDIOS FROM THE STUDENTS' PERSPECTIVE".

The aim of the study is considering interior design students' perspectives about their learning process, and how it affects their productivity and creativity.

The interview will consider educators background, perceptions, and ideas about the educational practices in interior design. The questions will be varied between personal and professional questions as an educator in interior design field.

Participation in this study is totally voluntary, and you are under no obligation to take part. You are free to withdraw at any point prior to finishing the interview. All data collected will be kept confidential and used for research purposes only.

Please briefly examine the questions you will be asked before signing the consent form.

There are no trick questions in this interview. There are no right or wrong answers, as there is no evaluation or assessment by any mean for your work or your personal attitude. Your name or any identifying characteristics will not be available to anyone, other than my supervisor and me, at any point.

If you have any questions you may contact me on:

E-mail: XXX

Or

Mobile: XXX

Researcher: Roba Shaheen

Supervisor: Paul Marris



Participant Observation information sheet

You are invited to take part in this research as a member of an Art education institution. The main aim of this study is to investigate pedagogical practice in the interior design field by monitor the concept of creativity.

There are three main objectives for this study:

- Articulating the conceptual and practical meanings of creativity that might be constructed from the interior design students' perception.
- Creating a typology of how different students express their creativity, or practice different type of creativity.
- Documenting excellent pedagogical practices undertaking in interior design studio, that perceived as successful practice fosters students' creativity.

The researcher will observe students' dialogues and actions, and how they construct concepts and practices that reflect their own creativity in the studio. In order to understand how students develop their perceptions and practices about creativity through their learning steps, the impact of the tutors and curriculum on students in the studio time will be considered.

Participation in this study is totally voluntary: no-one is under an obligation to take part. You are free to withdraw at any until the last day of my observation. All data collected will be kept confidential and anonymous, and used for research purposes only. The consent forms will be kept separately from the data description. Your name or any identifying characteristics will not be available to anyone, other than my supervisor and me, at any point.

If you have any questions you may contact me on:

E-mail: XXX

Mobile: XXX

=Researcher: Roba Shaheen

Supervisor: Paul Marris

Consent Form for Interviews

NAME OF PARTICIPANT:

Title of the project: *An investigation of the concepts and practices of creativity in interior design undergraduate education from the students' interpretation.*

Main investigator and contact details: *Roba Shaheen, tel:XXX*

e-mail: XXX

1. I agree to take part in the above research. I have read the Participant Information Sheet which is attached to this form. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
2. I understand that I am free to withdraw from the research at any time, for any reason and without prejudice.
3. I have been informed that the confidentiality of the information I provide will be safeguarded.
4. I am free to ask any questions at any time before and during the study.
5. I have been provided with a copy of this form and the Participant Information Sheet.

Data Protection: I agree to the University processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me*

Name of participant (print).....
Date.....

Signed.....

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete the form below and return to the main investigator named above.

Title of the project: *An investigation of the concepts and practices of creativity in interior design undergraduate education from the students' interpretation.*

I WISH TO WITHDRAW FROM THIS STUDY

Signed: _____

Date: _____



Consent Form for Participant Observation.

NAME OF PARTICIPANT:

Title of the project: *An investigation of the concepts and practices of creativity in interior design undergraduate education from the students' interpretation.*

Main investigator and contact details: *Roba Shaheen, tel:XXX*

e-mail: XXX

1. I agree to take part in the above research. I have read the Participant Information Sheet which is attached to this form. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
2. I understand that I am free to withdraw from the research at any time, for any reason and without prejudice.
3. I have been informed that the confidentiality of the information I provide will be safeguarded.
4. I am free to ask any questions at any time before and during the study.
5. I have been provided with a copy of this form and the Participant Information Sheet.

Data Protection: I agree to the University processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me.

Name of participant (print).....
Date.....

Signed.....

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete the form below and return to the main investigator named above.

Title of the project: *An investigation of the concepts and practices of creativity in interior design undergraduate education from the students' interpretation.*

I WISH TO WITHDRAW FROM THIS STUDY

Signed: _____

Date: _____

Appendix (7)

The students' interview Questions

Name

Institution.....

Date.....

A) Supplementary questions:

1. Why did you choose to study interior design?
2. Why did you choose to study interior design in the UK (for international students)?
3. Why did you choose to study at (the name of the institution)?
4. Which year are you in?
5. What kind of skills or interests do you have that drive you to study the interior design programme?
6. How would you describe your experience studying interior design? Why?
7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?
8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?
9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?
10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?
11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?
12. How do you see yourself as an interior designer in the future?

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?
14. Where do you prefer to work on your project? Studio or home or another place?
15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

16. Are you confident sharing your ideas with your peers?
17. Do like presenting your project in front of others?
18. Which is the most interesting part in the project for you:
 - a. Thinking of the conceptual idea.
 - b. Writ a list of the projects' tasks, boundaries, and problems.
 - c. Researching of information related to your project.
 - d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
 - e. Drawing sketches of your ideas.
 - f. Evaluate and criticised idea, and justify it logically.
 - g. Start hand drawing (plan, perspective, and furniture).
 - h. Working on computer software CAD
 - i. Prepare the final poster, model, power point show
 - j. Presenting your project and talk about it and explain it verbally.
19. Do you prefer thinking of the holistic picture or the details?
20. Do you prefer to solve problems and find solutions through words or practically?
21. Do you prefer gathering lots of possibilities or deep facts?
22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?
23. Do you prefer to organise your work or to work free style?
24. What is your motivation for your project? People or tasks?
25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?
26. How do you perceive criticism? Tactful or direct?
27. What is the social environment that encourages you to work in groups?
28. What do you like more: starting or finishing tasks?
29. What is more important to you: being creative or being organised?
30. Do you prefer working following a structure or being spontaneous?
31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?
32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Appendix (8)
Questions for interior design educators

Could you State your name and the date, please!

1. What is your qualification? From which institution you got it? When?
2. Do you have a role model educator, or designer, or artist....etc, who influence your career? If yes who and why?
3. When you started teaching interior design? And why you chose the academic path?
4. Have you noticed any differences between students since you start teaching and the students nowadays? What kind of differences (Positive negative)?
5. What is the theory underpinning the educational strategy adopted in this school of art?
6. What is the best strategy from your opinion in instructing studio, and why?
7. What do you think the role of studio in fostering students' creativity in the current strategy in this school of art?
8. What is your criterion to judge students creativity? In other words when you describe a student as a creative?
9. Have you ever talked to students about the meaning of creativity in their projects from their perspectives?
10. Have you noticed the differences between students' creativity or the different types of students' creativity? If yes what they are?
11. Have you noticed any common features, characters, or behaviours for each type?
12. If you have a chance to set up an undergraduate program from scratch, what courses would you require of students? What skills would be essential for future designers? (McCoy, 2011)
13. Do you think interior design education should be change somehow to cope with today's demands? If yes, what kind of changes?
14. Do you think there is an observable problem in current interior design education? If yes what is it?
15. How do you see the future of interior design education in the UK?

Appendix (9)

Transcripts of students' interviews

Institution (1)

Student code: EI.L

Institution (1)

Date: 28th November 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

I have chosen to study interior design because I was interested in doing things like interior decorating, and then when I get older I've done more research on it.

2. Why did you choose to study interior design in the UK (for international students)?

British.

3. Why did you choose to study at (the name of the institution)?

Will, I checked a few and I am from the side of Hampton and I was saying that I would not go further half an hour, then I elected here because it is a small course with small group of students so you are not going to be lost in their where lodes of people, it is more intimate because actually people who knows your name they are actually small group than a massive one.

4. Which year are you in?

Third year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

At school I did quite a few arts graphics and arts, and then in college I did photography and graphics, so I always have done like art projects. Expression arts or visual arts.

6. How would you describe your experience studying interior design? Why?

I think it is been really good, like for me it is a nice experience being quite far away from home, for personal level as well. But I also like the fact that we had three different lecturers in here couple have left a year ago. Each have unique different ways of teaching different things which is quite good.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, I prefer working in the studio, because being work with lots of working people helps motivates you as well like kind of group work effect

Yes it helps to keep you working as at home it is easy to get destructed,

Yes it helps to keep you working as at home it is easy to get destructed,

No I think it is quite good to be in studio having lots of group discussions, even if it is not a team project,,,,, like brain storming ,, someone might like

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Kind of like they always advise us to do that time management sheets in kind of a stay as we have more than one project at a time. But I think if it is kind of strategy or!!!! We have a two different projects, and they advise us to approaching them in a different way, I think it is more about time management really which working there. And I am not the best in this to be honest.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

I think it is pretty clear usually we spend one lesson or one lecture going through the brief and looking at different elements of it, so we have got always one lecture to talk about it and what is expected...

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think like one of my..... I am not one of the best in computer aided design, putting on computer stop my biggest skill, but we do get a lot of help like yesterday Stephen would stay a day long kind of someone needs help with CAD and he drops in and come in lay out to get help in things like that, I think that's really good if you say that you are struggling they will do the best they can to help you bring someone to help.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I think I expect some of them and some of the was quite surprising kind of not expected but quite enjoyed it in the same time

There is one of my first projects in the first year we had to create a personal space, and it was like a fly VAD and it was a choice of who you would like designing is he kind of writer or kind of poet or a cap or a ballerina they are all complete different and then you had to create the space for that person and that was kind of personal space, and that was not something ells I was expected and it was interesting.

12. How do you see yourself as an interior designer in the future?

I'm not sure to be honest, what i've got!. I definitely want to stay kind of sake, but it is better to get my own business!

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I think mainly by myself I have done several group projects and I like enjoyed them but I like main by myself.

Why?

I don't know maybe kind of not really sure easier to kind of work on time on my own page and then it is slightly difficult to explain my ideas to other people when it is just easier just to get it kind of all day and put like in full presentational kind of thing

14. Where do you prefer to work on your project? Studio or home or another place?

You mention that you prefer to work in the studio!

Yes, I find that is more done when I come in.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I usually do like really rough kind of sketching like thing just to see how they will work out, and then also I do a bit of research kind of further research to those kind of individual ideas to kind of see looking to the pros and cons kind of things like that just seeing.

16. Are you confident sharing your ideas with your peers?

I probably don't have a criteria, I usually kind of ask few people kind of thing like top two or top three ideas and just get out from people bring me what this wale

17. Do like presenting your project in front of others?

I hate presentations, and I am really bad in all public speaking and I think it's part of it as well, I really struggle with that

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Framing the conceptual idea, and researching and stuff like that.

19. Do you prefer thinking of the holistic picture or the details?

I quietly likes the details I usually kind of ends up seeing or modelling an aspect of my idea kind of thing.

20. Do you prefer to solve problems and find solutions through words or practically?

I think a bet of both but mainly kind of ... I don't know ,, I think there has been sometime with one to a certain point when I realise that this is not going to work front of patch adopted, where is a kind of drawing to computer whatever. So it is more practically about getting a way up to adjusted kind of things. Its mix of both, but more practical.

21. Do you prefer gathering lots of possibilities or deep facts?

I probably prefer gathering information before depth of information.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I think I more prefer do it in more conventional way. I like to try the new technologies and new computer software not the best of them but I liked to try them.

23. Do you prefer to organise your work or to work free style?

Free style.

24. What is your motivation for your project? People or tasks?

I think a bit of both, sometimes I get kind of shy and sometimes we need push. So it is usually toward the middle to get a little bit lost and it is just to keep up going.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think a bit of both, but are definitely so better if being slightly being pleased of doing something well or if I created something I am pleased with!

26. How do you perceive criticism? Tactful or direct?

So how you define creativity or see creativity?

I don't know ... maybe a lot of things like unique or never seen before, or adopting things seen before and making it new.

27. What do you like more: starting or finishing tasks?

Start a project.

28. What is more important to you: being creative or being effective?

I think both are so important but I think the creativity is more interesting and unique in the same way.

29. Do you prefer working following a structure or being spontaneous?

Being free

30. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

To put work in depends on what work is, because when it is a context practice is like a destinations comes right yet, I will get destructed very easily if any movement being quite. But if it is drawing or sketching I quite like it, I feel like more active yeh!

31. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch

I think it is kind of motivating, it does stress me a little bit but I am not the most organised person! your mind off?

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

I will start with the Brief (Red), then information about the first thought was (white), then start maybe look in different ideas because that inspire or help you create (green), then the (black) and (yellow) goes together will it says if that works well, then i think (blue) is along with the white and (green) hats.

Student code Ca.L

Institution (1)

Date: 28th November 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

I did a foundation year, after my A level I wasn't sure to what I am going to in the foundation year. You can have a taste of different aspect of design from fashion to graphic design and 3D design, and I choose to specialise in 3D objects and spatial design. In that respect of interior spaces and how spaces can influence people in everyday lives.

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

To be honest with you I did my foundation year in L., my parents only live in Huddersfield half an hour from L. I have grown up near enough to L. with the foundation year you don't get a loan or grand to fund it, so I had to live at home as it not feasible to move to a city as a feasible option and then the foundation year such a good year and the tutors are so good they advise me to apply to L. college of art in Blenheim building, it was in Vernon street before. In first, in L. I was a bit cautious with L. because I wanted extra freedom I wanted to be more individual away from home to push you to organise yourself in mature suppose to! But, L. is just a good form city. My parents just said to me you still have your freedom. Then in the interview with Stephan and James I really liked the city as a place, I mean recent

architect projects going on and the trinity have been built this year, the new arena is two very large project to visit and keep an eye on 3D projects design.

So you feel the whole city motivating and inspiring for you??

Yes definitely.

4. Which year are you in?

Year 3

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Just the way to think and finding the problem and solving it, so it is kind of highlight the problem with the existing design let's say or you find a problem in a space or in a city for example project in the past was finding a problem in a city and a problem we found was is nearer to got an e-lunch without spending the money of the high street café if you want to sit in a side you have to go to a "Starbucks" or "Pret a Manger" an expensive cafe, covered social area where people can seat and eat a bunch of seats. So we found that as a problem and from that we designed seating areas... covered seating areas thought the city which is free spaces for people to go in and set which we sheltered in, eat the food basically and you have got to look at the situation and the problem out of it to solve through design. So that is kind of a first stage of designing to find a problem and then how you visualise it. So I am really like doing 3D models virtual once in the computer or actual solid 3D models to visualise the space as a starting point to our project and this is really help to visualise the amount of space you have got to work. Obviously it is not possible to create a full size model of everything, but I mean of defining to 1 to 20 models and put in them little human figures in it to visualise the space you have to work with. I find that helpful with design process often creating your exterior I mean this is obviously in interior architecture we kind of have exterior shale car most of the time its over innovation process. So I think this is first stage of project would it visualise the exterior by creating it as long as a lot and drawing on a google information management like google sketch up or 3D MAX.

6. How would you describe your experience studying interior design? Why?

Big learning carve, so I mean it was..... a year before the foundation year I would have never said interior design is what I want to do. It is kind of the project subject of the foundation year it led me down, a paraphrasing is kind of realised it for myself so when I started in first year and I had interested in it but don't know how passionate I would be about it. And I mean as I go in design process as I've been improved, where the researcher project

and the design process from researcher brief to doing the research and the design how you go about it

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, when the can do when can't do, I mean when times where you the only person here or something in what is the point of coming when is no one else here! And I just stay calm and doing the same thing because there is no body in. but when I the supposed to be closer to deadline more people do come in and I mean towards the end of last year is about eight of us where in nine till seven nearly every day and we where bouncing ideas of each of any which kind of is the atmosphere we did say we should do this all the time but it just motivate people to come in and get in but I do like the space I don't have a problem with it.

It can be motivating and de-motivating depending who in the space (people) the people in the space, it's a good working environment..... Model making and computer stuff in is a plenteous space for us, it is a lot better when it's full of people here and we can talk about the projects.

Yes in general I don't work well in my own I don't like spending lots of time on my own, I like being able to talk to people every break every soften level of my concentration maybe at that grad but for working short bites is better. Where is if I home on my own I find it hard to concentrate and keep myself focused because I can't have a bit of a break and kind of relax my brain for 10-15 min and get on it again. It works well with the college if we did not have the building that vary as well is just a flag of workshops of wood work and materials, I mean it is not a storage for materials and things like that, and we have got the other building which works with it. I means us somewhere when do kind of feel would not motivated in like in university surrounding if we were in a building up there with over all of courses and kind of, the energy you get from everyone else around you, sort of miss out when I was here which is back to say kind of things sometimes you come in early and you are the only present here, you would not get that if you were in the building out there because it's going to be hundreds and hundreds of students working around. And when you see lots of people working it motivates you to push yourself a bit more.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

So and so, obviously it is kind of need to get around the brief at first, and so break the brief down into key words and kind of brain storm what is the brief is asking. A starting of me is often a mined map so I have a title of a brief in the middle and whole of brief brunches coming off and that is kind of my thought process. And then from that I look at what aspects

have been highlighted to them so for example this project here is the cube project is all about small spaces and innovative design so I was looking at multi functionality and multifunctional furniture and then materials and how can spaces adopt and it just picking up the relative research and then applying it to your design so finding projects that it can take aspects from that your own so I mean it is a bet cheeky but is obviously a lot of design is inspired by something you see, so in areas professionals visiting come in as we furniture making building someone's idea of building with coffee and then take in it to the next level and creating a coffee table out of coffee. so he created new material of which is based on the material is the actual coffee beans because..... the idea was laid from seeing how many coffee shops have popped up when he was in the university and he found that when they make the coffee they waste a lot of beans crushed and he thought it could be use further so he developed this, so its first taking inspiration from all things but finding the important research you can apply it.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

You have to quite often yes, it is not that clear at first, you do have to look into it more. kind ofsometimes..... get rid of your own constraints, I think here in the beginning of the cube project you got an aim to cube the space two meters by two meters, that is a starting point in you kind of can adopt what I mean lots of people fall and adopt the form of the cube and the shapes interior spaces in taking different forms is often the brief is starting point and even to the point of you can choose emerging technologies that maybe un fully developed tech book in the next ten years for example you know it can be developed it does not has to be so this project pushing you to kind of go outside the boundaries where is some projects are more refine and specific so you have to create a visitor centre for this purpose and it got to follow one of these themes so that kind of projects outline what they expect where is this project is more conceptual survey wanting it to be creative thinking really different wacky ideas both of brief just always outline the tax of drawings it want to empty drawings and one section and I will save got to produce X amount of visuals so it does sets some constraints of the amount of work they expect but not but still how you interpret the brief quite a lot say.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think time management is quite key the amount of time you have got on planning put in each part of the design brief so obviously you have got a research and then your concept design and then your final design and your visuals so planning how long each aspect will take you.

So you think the time is short or you need time managing?

You need to be on pie with the management of time, they do give you enough time but it is easy to think that you have too much time and makes you do not use all of the time. From part one you have got to plan your time so I mean thy thinks like making personal development plan, so that kind of you looking at weakness and strength so I look at my weaknesses and say one of my weaknesses is dyslexic so I struggle with writing elements and reading elements then from that ... attend specific tutorials for writing, and because I am dyslexic I can get extra help from DSA to save students allowance. I have a weekly tutorial regarding my dissertation which is the written element of this project because I knew this aspect would let me down and I don't want that to bring my the rest of the work.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Yes, what I mean it is interesting how different courses are run, this been courses 20 people in a year to graphic design, fashion design, and interior design have been a group of 70 people. So it's different to see how..... I mean of my house does graphic design is interested to see the differences in length of briefs and amounts of works. I mean specific course structure is similar throughout we have got PPP elements which is all about Personal Professional Profile which is creating unique grand image for yourself which is aim to have a specific type of design you want to go in specific interior design. Because it is got so many different sectors of design, ppp element refines the amount of sectors of design for you and highlight where your interest lay. So if you interested in all courses do some elements of that in different way, but yes we have a large projects that takes three months to do, and that is a final major project where as graphic design do 8-9 small projects over the same amount of time. So you got to imagine in and got a research in a same project for three to four months where is their projects is going for a month in a month.....even the depth of information when you doing the design not just the research but have a changes. I have got to create different drawings and different manufacturers and different builders. So if you get a natural drawings you get manufactured products you have to create even third different people because interior design is the design of different aspects I supposed.

12. How do you see yourself as an interior designer in the future?

My professional profile and my final major project have been led to odd creative work spaces offices. For like; architect, graphic designers, or for people like minor people who would like create while they exhibit. So it's not just a place of they can come in to rent or work it's a place where also they can exhibit their work and they can show work they can do. I have done a bit of work experience a placement a smaller architect about ten architects and

designers working in that place, and I really enjoyed that atmosphere it was great, maybe think I would not like to work in a really large company with hundreds of People and you get the work at the chain that's not the type of atmosphere that I enjoy it!

So, you prefer smaller offices or private own business?

That would be ideal, I still do want to go to the roots of interior design. I am not going to lend myself and say I am an office designer, but ideally in the real world I see myself working on that.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

We have done team work projects before and I have enjoyed them and I am quite a vocal person and I do like doing presentation and so in that situation when you got to talk to each other a lot about your ideas and you think your ideas will work well. They have been issued before when group projects and people in the group not saying eye to eye, and it does obviously it ups and down but you have got to find the balance in kind of ride with it. I don't dislike doing then there are aspects if working in teams there can be found frustrating!

14. Where do you prefer to work on your project? Studio or home or another place?

In the studio for working atmosphere even if there are no students in the studio, when I am home I rely on being home relaxing and socialising and I quite liking to keep it like that... home or studio, I never go or work in a library I don't like the atmosphere in there for some reason. Obviously if I am doing or building a model I go to the work shop because the atmosphere I relate to building a model.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Sketching is really, I mean in my sketch book, I blog which kind of has a research re blogging then speaking and saying why I am interested in. In my sketch book I have some element of my research that end up research and from that I kind of influence a little ideas my fault process. For example so projects in the minuet, the cube invisible structure was my concept so I defined being invisible structure would be good you look at the structure and you don't think that's was holding the building together it adds visual meaning for users. So I was looking into printing press and the location was in a printing workshop so I was looking at the printing press and the heritage of the printing press which led me to..... the letters from the printing press and how you can use this in the invisible structure so I just draw a simple sketch of all of these different letters from the letters press can a making a chain, and the

chain would suspend my cube, so just from looking at the research printing press in the letter, I will have to stuck some pictures in of printing press in a letter and a little sketch of a chine made out of these letters and such. This got the visual meanings because of printers and remained us of the heritage and also when they look at it this is for the structure and it is made out of the letter and the original letters play wood. It would have visual meaning for them being a printer and related back to the history of the business.

16. Are you confident sharing your ideas with your peers?

Yes, and I think it is very beneficial for the design process.

17. Do like presenting your project in front of others?

Yes, I like it. I think visualising in a 3D form is really important and I mean it's harder to visualise it in your mind than visualise it in 3D visual format. Maybe it is just you get some simple blocks from around the room and different and stuck the one you getting on. Then discuss it with my friends.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

The concept idea is really a playful aspect before you kind of way out the possibilities, in the concept ideas you allow in the real world how imagining you have a concept idea and then you sit down with your client and the client would say I really liked your ideas but it needs to

follow some of these constraints as well and that is when you need to refine the concept idea and make it maybe more realistic let's say, or maybe feasible. I mean in the stage I am in feasibility haven't actually have the feasibility documents and all that kinds of aspects of thinking of sustainability and that for feasible actions and manufacturing costing and all these kind of stuff.

19. Do you prefer thinking of the holistic picture or the details?

I think both to keep up to date with emerging technologies because we got to move with the time I suppose. Like drawing on computers better but it got it ups and got its downs. It will speed up the process some way but it lose some traditional values. So it's a combination of two so when I do the placement the ways I didn't see hardly any hand drawing designs for one project specifically wanted to see some hand drawing pencil sketches just for (Hermasu) to visualise it so from that the designers Thomson hand drawing sketches to visualise as well

20. Do you prefer to solve problems and find solutions through words or practically?

Practically I get the experience practically I think, one of the aspect is often with dyslexic people is problem solving. So the way they trying to solve problems is often very creative. I know but when I had my dyslexia test they often they will ask you a question and then they ask you how you solve it in your head to find the process is in there, and I was told in the way I have think about the problem is quite innovative and creative in problem solving.

21. Do you prefer gathering lots of possibilities or deep facts?

I think the initial is a lot of research. Yes, a heavy amount of research... wide variety of research. So there literal thinking, when start the project you start literally and get lots of broad ideas and then see which you prefer and refine and research that way.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I would like to take a risk but I suppose in real world design it is hard to take a risk, it depends on the project you are doing as well if it's a high risk or low risk (T). So if it's a fun playful project for kids you will wanted to be playful, or if its project for just a professional company I would go about it in a different way.

23. Do you prefer to organise your work or to work free style?

Organise my design process.

24. What is your motivation for your project? People or tasks?

I am quite a self-motivated I think I will be.... in the beginning of the project I am motivated, and then maybe if I am doubting my design at some point just not happy with it feeling could be better maybe I need a push when someone tell me you can create something better than that. Sometimes I can be harder on myself

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

To get started my self-satisfaction, then I need someone to tell me if I am right and I am designing

26. How do you perceive criticism? Tactful or direct?

Direct.

27. What is the social environment that encourages you to work in groups?

It depending who you are is working with! Exactly, I don't want to say specific example but..... but the idea of working with a team is good, and I have been a team leader in some projects before and I kind of organised what rule people will take in a design process so finding out what they are interested in and trying to give them something they will enjoyed it basically because obviously if they enjoyed in a project they will get the art of passion in create something.

28. What do you like more: starting or finishing tasks?

Finishing.

29. What is more important to you: being creative or being effectiveness?

Initial ideas of the concept is really important to make the creative idea is possible, the creative idea is the beginning then become refined and developed.

30. Do you prefer working following a structure or being spontaneous?

It is important to follow a structure plan, so you set a date where you want to achieve something by evaluate yourself, and say if you would achieved it by that date or not. So, I think yes I am following structure plan.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Exciting active environment rather than quite serious environment

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I do think deadline is important because of with a design project I don't get me wrong if I am a finish point, but I can be happy working with my idea. But I also think I could just carry on that project for another 4 or 5 months keep adding bits to it modifying it. I am not saying I am not happy with it when I hand it in but I feel always there is things I can do.

If I have good time management I would not suppose doing anything in that time before the submission except printing.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

White hat

Blue hat

Red hat: how you feel about information in research out of a project and how you interpret the research you have already

Green hat: i think in this stage i will have a set of ideas and will be able to see proc and cones of each design

Black hat

Yellow hat:

Student code: Fr.L

Institution (1)

Date: 28th of November 2013.

A) Supplementary questions:

1. Why did you choose to study interior design?

Basically because my dad is a property renovation and developer, so I wanna go into that with him. That's why I chose this, because he doesn't know much about that area. So I'm gonna go and work in that with him when I'm finished.

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

No, I'm from Wensleydale which is about an hour drive, and I was familiar with the place, the city anyway, so that's why I decided to come here. I've heard a lot about L. College of art in the past. But mainly because of just the area and I was familiar with it. And I loved L., the centre of the city as well.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I have, lets read that again. What kind of skills or interests do you have that drives you to study interior design.

I've always been keen on perspective drawing and I've always wanted to learn more about it. So visuals and then learning the softwares like Photoshop, CAD all those sorts of thing, I knew nothing about them before. Um, I've always love drawing so I developed skills in that while I've been here. That's probably what made me want to come here the most.

6. How would you describe your experience studying interior design? Why?

Really, really difficult in parts. [laughs] I've come across things I didn't think I would have to do. Especially certain parts of CAD. Things like, more architectural than I thought. But, what kind of ...

So, difficult. You say it's about CAD stuff and architecture and you weren't expecting such things.

Yeah. Not as much. But that doesn't mean to say that I haven't enjoyed it but I have so.

So, difficult but enjoyable. Yeah. Ok.

And quite surprising I would say. Challenging.

Very challenging yeah but I don't like it when it's easy. So, it's been challenging for me but I've enjoyed it yeah.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Sometimes. It's kind of [laughs]. This space particularly I'd say it's good because there are areas you can go to that are quiet if you want it quiet. If you wanna be with people to ask them questions and, about anything that you don't already know about you can spend time with other students and then the teachers are here quite a lot. But there are spaces in this building where you can go to be alone. So I think it's quite a good working space. There's a lot to work with.

The space?

The place in general including people. Students or tutors or

I think it's difficult cause of the building we're in. cause we're not in the main building that can be quite difficult cause if we want certain specific support we have to go over there. But that's not, just being laziness. If you can't be bothered to go over there.

Um, not inspiring at all being in here.

What's an inspiring place for you?

Well it's just, we never really, there's not much work around to inspire us. There is a little bit of past student work downstairs in the corridors and things. But like, in here when I go to the other rooms and the studios, there's work everywhere. Other people's work on the walls and all around you whereas we don't really do that in here.

Ok, so you mean the place itself it's not really inspiring.

Yeah.

Especially this room. All the rooms probably. But as you walk through the corridors downstairs, you sort of look in and you're like, 'oh, god that looks really good'. 'I would love to use that technique', but they're not in our workspaces. So it's hard to find inspiration sometimes.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Start with, if it's a site. It's always best to look at the site first. I find. And find inspiration from the site itself. Primary and secondary research always. More primary than anything else, if I can get that done. Then I do a lot, my strategies are sketching. I do a lot of sketches. Development sketches. That's how I work best through my development period probably.

Ok. So you prefer to understand the site and develop ideas in sketching Yeah. Ok. Cause sketching what I feel I'm best at. So that's what I do to develop my ideas.

So you feel it's like, the best skill.

For me, yeah.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Yeah, they're not clear. They're not clear because they're so broad, in the design. But then that's kind of my job to narrow it down and make my own interpretation of it. So they are quite, at first it's really broad and really hard to understand. But that, I think that's the whole point. So we're not, cause as designers you're not restricted. Especially when you're studying. I mean, when you have a client, yes, but it gives us the opportunity to just, go wild and do whatever we want. But it can be quite confusing. Ok. Cause they're so broad.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Probably on the architectural side is a challenge for me. Using CAD. Especially detailing which is what we're starting to do this year. So detailed, you know, components, how they work, how they fix together. Whereas I might draw a door, and go, ok, how does that door fix to that? I genuinely don't know. So it's something that I have to spend a lot of time on, figuring out how that works.

So it's quite, that's probably the biggest challenge for me, how I wanna put something there, but I don't know how it would fix there.

What you have said, are there suggestions to solve this issue?

Lots of practice on CAD. Just cause that's half the problem, not being able to use it to the standard I wanna use it.

And looking into detailing more researching into how, you know, just standard connections. How, you know, cavity walls all these sorts of things which, you know, would just be research.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Yeah. Is there any other subject or, The writing side's of a high standard. But I think that is not necessarily something you can learn. It's just if you know what you're writing about, then you can write, but I mean the standard is really high.

Ok. Do you learn then, or have you progressed since the first year?

Yes. Definitely.

Ok. So you feel like it could be more the first two years, so it would be easier to cope with the third year.

I don't know whether it's, I've just developed and progressed on from that, through practice, just through being, cause we have writing through second and third year, so I think it's just knowledge of new words, you know, reading and seeing how other people write. I think it's just through reading more and writing more over the first two years. Now I feel a lot more confident and, there are, you know, we get really good feedback. Emma, my tutor, she doesn't just say if the point's good, she talks about how you're actually writing you know grammar and everything, you know so, I've developed from the feedback as well.

12. How do you see yourself as an interior designer in the future?

I would definitely like to get a job first as an interior designer. Gain more experience. So probably see myself in a job. Working for somebody. I'm interested in doing an internship at some point. And then when I feel confident enough that I would like to start my own business and go into property development and renovation.

Ok. With your father.

Yeah. Hopefully on my own at some point. .

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

On my own. Ok. Definitely. It can be quite difficult in teams.

Do you like to say why?

Probably just because you have to compromise all the ideas that are in my head. Likewise for everybody they might not like my ideas, vice versa. So you have to compromise a lot when you're an interior designer or you're an art person you have ideas in your own head and you have to compromise and I don't like that. [laughs]

Yeah.

14. Where do you prefer to work on your project? Studio or home or another place?

Probably in the studio, because it's, it's comfortable but it's a working space. And for me that helps. When I'm at home, like home, home, at my house in L., it's too comfortable and there's too many distractions as well so.

Ok. I seem to get on better with my work when I'm in a working environment with other people. Ok.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I usually make a combination of, say there's four different, say were talking about a staircase which is what I'm doing on this, the cube project, there might be four different staircases that I like. And then I'll start combining part of all the different designs to come up with my own in some sort of way. Instead of just copying it. Develop my own style or something.

16. Are you confident sharing your ideas with your peers?

I'm pretty confident to show them. Cause I'd rather if they think it's rubbish or it's not gonna work, I'd rather them tell me before I go on with it.

17. Do like presenting your project in front of others?

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I like the sketching, but I think the concept stage is probably quite fun. When you're just trying to think of different ideas. And there are so many ideas going on in your head and then you choose a final concept. That's always quite fun, cause you're looking into so many other people's work and you've, you know, you find out a lot, you learn a lot from that stage I think.

19. Do you prefer thinking of the holistic picture or the details?

Holistic as, what do you mean by holistic?

It means, you can just see the place as it is in your imagination, or you start thinking of the details of the place. For example, you like thinking to put here the wool, the borders, tables and, there are doors, Yeah.

So you mean do I imagine things in the space.

Yeah. Yes probably.

Any space that I enter, if I don't like the way it's designed I'll...I think it's both should be done,

But which one is more preferable for you?

Probably the one you just said where you picture details.

Details. Ok. Good.

20. Do you prefer to solve problems and find solutions through words or practically?

Do you prefer solve problems... probably experience. Words don't, I take in images rather than words sometimes. So seeing something and having it in my memory is probably better than reading something for me.

Ok. I understand. Um, so, sort of like photographic memory. So, seeing something and having it in my head is better than reading.

Ok.

Yep. [laughs]

Does make sense.

21. Do you prefer gathering lots of possibilities or deep facts?

Probably gathering lots of information. And then I've got more to choose from

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I like to take the risk probably.

23. Do you prefer to organise your work or to work free style?

Yeah. In my sketchbook I generally annotate notes, things that I like, things that I don't like, on pictures, or my sketches and then sort of, at different stages of my work I do a word document of, it's just a written evaluation. Basically saying what I liked what I didn't like. Why I've chosen this. Why I haven't chosen that and I do an evaluation page in between, you know the concept idea, moving on to the next and just describing my ideas and why I chose them basically.

Just keep me in check as well. [laughs]

24. What is your motivation for your project?

As self-motivated. Definitely. All the time. Yes. Most of the time [laughs] that's good.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

Ooh, I don't know. Can I say both. Yes you can.

Yeas. I think probably both. I do care what they think. Ok. As well as, I'm proud of my own work and sometimes I'm not proud of my own work. So both.

Would you mind to say why? Why both? Why you care about what they are saying.

Cause they're experienced and I'm not, as experienced as them.

26. How do you perceive criticism? Tactful or direct?

So yeah, I'm fine with any criticism or feedback.

27. What encourages you to work in groups?

Beneficial feedback

28. What do you like more: starting or finishing tasks?

Starting a project

29. What is more important to you: being creative or being organised?

The creativity.

How do you define creativity? Or, what is your understanding of the word creativity.

Sort of creating my own designs, whereas when you're using, like, CAD, it's so strict and, you know, when it's creative it's like you're putting your own input into it and that's better.

And how do you see, if I said, what is your own creativity. Where you think that you are really creative. What's the area that you feel that you are really creative?

Probably the way that I draw. Like, sometimes I do abstract visuals so, you can make your own mind up. Sort of creative in the way that I sort of put my ideas onto paper.

30. Do you prefer working following a structure or being spontaneous?

Yeah, I prefer to be free. Depending on your moods and inspirations?

Yeah, yeah. [laughs]

32. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Quiet serious environment.

Why?

I wouldn't get anything done in an exciting active environment. It'd be, it would be too much, [laughs]. I work, I do work better when I'm just on my own. Easily distracted. Yeah. So I can focus.

33. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I'd probably say both. It motivates me when the deadline is closer. I get more motivated to do work, but at the same time, probably get quite stressed as well.

Is it confusing? So you can do, or produce more work, or you can't do anything?

No, it's not confusing, it's just added pressure but then that makes me work harder and move on.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

What order would I do these in?

Yes, you can use some of them or all of them depending on what kind of, or type of thinking you use. Which way?

This way. [laughs]

Ok. Interesting how different,

Yes, I wondered what everybody else did. [laughs]

Yeah. So, you think this way. Yeah.

On your projects. Yeah.

From beginning to, you gather information then managing, can you explain. You want me to explain.

Yes. How you understand it and how you see it.

Yeah, probably gathering the information, primary secondary research, da da da da, managing and thinking. So, a thinking process with that information. Then I would definitely go onto the good things about it why it is gonna work, or might work. Then I would start, when it says individual feelings and hunches, I look at that as shy something like, might not be beneficial. You know. Maybe I won't use that or, whatever and then you obviously get your cautions and difficulties at some point I think, along, towards the end of a project. And then, alternatives and creative ideas, which would be, me finding alternatives to what went wrong.

Ok good. Great. Thank you so much for your time.

Ok. No, not a problem. I hope it was alright.

It's amazing, very interesting for me, I hope it's interesting for you and not boring.

No, no, it was quite funny, I've never asked myself those questions before.

White – Blue – Yellow – Red – Black – Green

Students' code: Go.L

Institution (1)

Date: 28 November 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

I am a creative person so I needed to do something in the creative field. I wanted to do art but I thought my out comes at the end will not lead me to anything so I decided to specify a creative path and interior design I am interested in. When I came to the interview it interested me even more, with Steve lecture all what he said interested me.

You just mentioned "creative" how you define creativity?

I think it is being able to visually show your work in a unique way, and just a creative innovative sort of way presenting of work instead of having to the ordinary day to day job.

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

It was in the fen list when I came to my interview which I liked a lot not only that but the facilities was great. I liked the opportunities when I came to my interviews and I hosted that more when I felt here like home more than other places. It was my first choice as well, so I was happy to get it.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I like being in different spaces and I can always visualise what can put into space or how can make it better. I don't know I have done it from very young age to I liked to complete lines like complete a game creating a house I never played the game. It just like creating house and I knew from then I wanted to do interior design.

So it is like an early decision?

Yes

6. How would you describe your experience studying interior design? Why?

Very good, it has been good for the three years. I think I have learned a lot due to the tutors being good at their job. My experience being positive.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, it is helpful because whenever sit in the mood everyone get down to work and when it silent I don't know when you in that frame of mind and everyone else around you is working you more focused I think ! When your class mates working as well very hard. So yes it is good environment I think.

Yes, very supportive we knock corner each other and we walk around and have a look at everyone's work and we can give advice or opinions people help how certain computer programs good.

Yes, if everyone is here I found I do more work when people were here. If there is less people I will be less encouraged to do as less as much working people around me

No not inspiring, it is an interior design course and this is not the best room to be in to be honest. So it is not helping me with my work as an environment.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I have a diary and I keep in my own sort of plans and when I need to do things and what dates to get off, and I do that in the beginning in each term so I know deadlines I need it and I set my own tasks for each week.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Yes, but to design is quite difficult in the begging, I think I will need few weeks to get in to it. It is just kick off starting really. I think that the same as really want to get everything in a few weeks, and I am quite positive about what I am doing. By time I became more encouraged and positive about my work.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Computer work CAD and MAX and Photoshop, we have taught briefly what are these three are but to get the requirement of our final hand in we have to be really good at that and to get a good mark and I think I am lacking in the skills in the computer side a bit.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I did expect what we have been given because it is college maybe is different as it works similar to what it was in the school so I did expect the educational system. It is the same as school really!

12. How do you see yourself as an interior designer in the future?

I don't know there is few sort of different areas I would like to work in, I think it just like work experience is quite hard. There are few areas in particular I would like to work in like visual merchandising that my main area I want to work toward visual merchandising. Just to get work experience and get that in your CV touchy get some work. Hopefully I can see myself doing some work like that in the future.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

On my own solely definitely, because I think I am quite an independent person when comes towards working. I am good in a team work but I prefer to produce my own work and say it is mine rather than being team's piece of work.

Do you mean through the working in project or by the end of a project?

Actually both!

14. Where do you prefer to work on your project? Studio or home or another place?

It is different for computer work for example I like working here because the resources and computers and this is help if I need it so I prefer working here. With sketchbook work I much prefer working at home it get all done at home because I like my own time on that and I got my pats and colours at home and I don't like bring it all here. So it is between here and home, no third place.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I will draw some sketches of few ideas then I will ask people which one they prefer specially mum she is really good in that and she helps me a lot. I will look at them and see which one I prefer more and which I don't like I will avoid. Other people's view is really important. My mum is really creative as well and she is designy as well.

16. Are you confident sharing your ideas with your peers?

After looking on few sketches, and then obviously get some advice about if it is working well! How it looks, and when I draw it in Sketch Up and work well or the final look of it. Then I go back to the sketches and see which one works better when drawn in computer program.

17. Do like presenting your project in front of others?

I hate doing that I am really bad at presentation I go really nerves I really not comfortable talking about work even I have produced the required amount. It is not I did not doing enough it is about I am not confident enough to speak about it, I found it difficult.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.

- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Drawing and sketches ideas definitely. Free hand sketching to get my ideas into a paper I like and enjoying that.

19. Do you prefer thinking of the holistic picture or the details?

Big picture

20. Do you prefer to solve problems and find solutions through words or practically?

I think I will experience that practically because I will not do this mistake again, I think if you done something and change it physically you will remember it more and I will not do mistake again.

21. Do you prefer gathering lots of possibilities or deep facts?

Basic information I am quite direct straight away person, as I don't like too much information because it goes off topic bet. I mean I will go around different areas and get different sort of ideas but I am quite focused on the main task. The brief I will stick to it, not going for too much tangled information as it will be confusing and the sketch book will look random and bazar. But if I stick to the bone link directly it will looks better.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Conventional safe idea.....I don't know! I will ask Steve if it is going to work or not!

What if you graduated?

I probably will get the safe conventional idea.

Older technologies, I like drawing I am more a drawer rather than I am a computer expert, I am not very good at computers. But I think a lot of firms quit like that because for client if you

been in interview and they said they don't like this you can just re draw it again and that much better rather go and re design the whole thing again. So yes I am better in older techniques.

23. Do you prefer to organise your work or to work free style?

Organise my work.

24. What is your motivation for your project? People or tasks?

No, I am self-motivated all the time.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think a bet of both, but maybe mainly mine because if I feel like I've underachieved I would be way more disappointed than the tutors feel I am underachieved. So a bet of both but more my satisfaction without being selfish. I like when I look back to my project and be proud of it.

26. How do you perceive criticism? Tactful or direct?

Tactful, and I don't like talking in front of people, I don't mind Steve or Emma tutors but not peers as I get very embraced.

27. What is encourages you to work in groups?

I don't like to work in groups.

28. What do you like more: starting or finishing tasks?

Finish tasks.

29. What is more important to you: being creative or being effective?

Both, because for a place the two reasons exactly what will make it successful as to be creative and underneath to work properly these are the two main features need to be in a successful design. So I would say both definitely important.

30. Do you prefer working following a structure or being spontaneous?

I like to work on a structured plan because I will know what I need to do and I can take off what I want and stick to our structure plan.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Quite serious environment, I need to be in a disown environment. I can't work in a distractions or music or people talking.

33. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

In fact in everything we need a deadline to ends it or it will goas on and on and on. So deadline is a good thing but in the same time can be very stressful, it does not nessecrly turns my mind off but it does cause me to go ahead especially a week before. But it is good to have a deadline and put stamp on it and you know you have to finish before that day or a day before. I feel nervous about it and I can't sleep the night before the day I hand in, even if I know that I've done as much as I can do it is quite downswing.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

White: Gather information and research about what it is actually needing to get a general idea about what going to be in the project.

Blue: Managing thinking process sort of structure in my head what is the rest of the project going to be.

Yellow: The values and the benefits I think it is important to look at quite in the begin because it is like the design really and what is the values are and how beneficial I look at different alternatives ways great ideas

Black: Then look at cautions and then different alternatives and think realistically about

Green: Then maybe get creativity in the work

Red: My feelings take a lot of in the end and most of my ideas depend on what i mostly enjoy like a final stamp really

Students' code: Gr. L

Institution (1)

Date: 11th December 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

Because I decided I had to have a degree, which was an affair I didn't want! But so, if I was going to do a degree I wanted to do it in something I was passionate about, I wanted it to be something which interested me. Interior design is like, if I was an interior designer and you asked me to design your house, that's the most intimate, the most wonderful thing you can be asked to design. It is the place where individual people hideaway and it's the place they call 'home,' it's their own little castle. For me to be part of that, it just is really magical and I like interacting with people. I find people interesting, so I like looking at how people live and how best to design for people's lives. So not just design because, "oh it's designer!" design because it is relevant to the client. That is why I wanted to do interior design. It is something like this connection between your home and your personal space...I really like that.

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

I chose (name of institution) because I left it to the last minute really to apply to places, because as I said before I didn't really want to go to university. Then the fees went up, so it was like, if I'm going to do it, I've got to do it now. I only live about an hour away by car, so (name of university) was close. I applied to Central Saint Martins and Nottingham. I got places at both but choose to come here just because it was closer. I felt like I wanted to be nearer home, I was only 17 or 18, so I thought, I'm not ready yet to just leave to London. That is why I'm at (name of university), not because of credit or merit, just because it was close to home. But I like it, it is very good and the tutors are nice.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I would say I am interested. I'm interested in everything, it doesn't have to be just to do with interior design, and I think this is very important when you're branding yourself and when you're trying to stand out from the crowd. As I said I am interested in everything and I have a very analytical brain. When I'm looking around I see those computer screens but I am

not seeing those computer screens! I'm seeing a row of perfectly aligned squares with perfectly aligned rectangular elements. Everything I see is in shapes, everything I see is geometric and I think that's very important for being an interior designer. I am interested in everything so I like all the arts; I like film and I like travel. I like everything and I think to be interested in all those things gives your body of work a depth. It's constantly feeding it. So, if I am interested in things and interested in new things, hopefully that would ensure that I am a good interior designer with a lot of knowledge, and lots of inspiration so I don't get bored and start designing the same thing over and over again just with slightly different colour walls.

6. How would you describe your experience studying interior design? Why?

My experience in (name of university) has been positive, has been quite good.

R: Why?

The tutors are lovely, like 'J' who does contextual studies is great and he's got so much knowledge. He is really good at helping you with things and good to talk to. 'S' is like a guru of knowledge just spouts all these names, all these places; he's been there, he's done everything. He's really fun and he is really inspirational to be around. 'E' is really nice, she is so technical and she knows all the technical things which is really helpful because you know a building has got to stand up, a piece of furniture has got to stand up. I was particularly annoyed when they cut the course, and I feel like this should be full of people studying and it's not. There isn't a big pool of people-inspiration. There are not a lot of people to bounce idea off, which does make it quite difficult because it is something I really like. I like to talk about things with people, so when there aren't a lot of people and everyone is my age doing my thing that is a bit naff. But generally, it's been quite good, though I'm ready to leave (laughs). I'm sick of education, I've had enough.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Not really.

R: Why?

Like this room is beautiful especially at this time of day, the light and all these windows, but I hate lilac and everything lilac (laughs)...it doesn't help to have lilac blinds. But there is good space, we're not cramped in anywhere. There is a lot of furniture that's unnecessary, and we have got a lot of crap piled up, which clutters your mind if you think in that way.

R: What about the environment, the people?

The people are great. There is no one that makes me feel like I don't want to come in to college or anything.

R: Being with your peers and friends?

Yes, I enjoy that and it is beneficial. It is very beneficial to talk about things and I like to get different people's perspectives, and most people are really willing to talk. Here we can debate about things and we can debate about world issues; we can debate about fabric swatches. It is quite nice, though some people are like, "I just want to go out and get pissed!" but some people are interested, which is nice.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I am an awful time manager...awful! I probably should have a strategy (laughs) 'S' always says I should have a little histogram thing, you know, "this needs to be done by this date, and if it overlaps this date, it's going to effect on the next stage." I kind of have that in my head, but I always just read the brief. I think that is really important because that's where you're going to get your marks, but then think about what I have to do, what I'm not supposed to do, and what I can get away with. I don't just want to be 'by the book,' I want to do things a little bit differently. So, I read the brief then I like to mind map lots of things, and I like to collect stuff I like. When I'm working, I'll think of a word, then I've got stacks and stacks of magazines at home, like up to here (indicating with her hand). My housemates are so annoyed with me. I leaf through those and tear them out and stick things down and cut things up and stick them on top of each other, you know, just looking at things that have gone before which is going to fuel what is coming next. Then once I've got all these images in my head, I might go on a walk and see other things. Like, I see these shapes in the corner of my eye while I'm talking to you and that might become something later. So, I like to walk and I like to look at things and I like to listen to music, then once I've got all this inspiration... Generally, I have an idea and I run with it. Our tutors like to think that we make lots of different ideas and develop them. Maybe I do, but I discard them straight away if I don't like them. I try to keep it personal and spiritual, and I like to think of a personal interaction with things.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

No, they're really quite clear. Every brief we've been give is usually two or three pages. 'S' likes to put a little quote from someone or some philosopher, which is quite nice because it gets your mind thinking about things. Then there is a really quite detailed breakdown of things and usually lectures we're going to have and a time table, then the design outcomes. Each brief uses the same [format]. We know them and we ca work to them so I think it is quite clear and if it's not they're always here to ask or email.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

The main problem for me is time. We've got strict deadlines and I've been over on this deadline by twelve hours. I can say that I am really rubbish at time planning. Every time I try to get things done. I'll go all out in the beginning when we're given the brief, and then because I have got this floaty analytical mind I'll see something and start something else. I've already started my final project because I got really passionate about it, and that took

time out of this which is fun but wrong! You know in the eyes of the marker, so that is the big problem that faces me.

R: Do you have any suggestions to do that?

I should do these time-planning things like 'S' says.

R: Do you think if you did the planning thing and stuck to it, do you think it will work with your way of thinking?

That's just it, I don't think it would, that is why I've never done it! Well never properly done it because I think I am a bit of an anarchist. I think if someone puts me in a box, I don't want my time and my creativity to be compartmentalized into week slots. That oppresses me. I want to think I can flow into this and I can take whatever I want and go and do that part next week. Whereas, if I had this histogram time-slot do-dah, I'd be like, "oh, I can't do that because next week I need to be thinking bla-de-bla, not what I'm thinking about this week." So, that's why I've never done it! But I never tried it, so don't know it until you've tried it. It's something I am definitely going to do in the next project, time-plan properly and use the week slots that they allocate you.

R: Promise to tell me what happens when you do that.

I might go mad!

R: You just mentioned creativity now. What do you mean by creativity?

I mean fire! I mean spark...it is something which I think is innate within people. It is like an uncontrollable fire no matter how much water you throw in you can't put it out. Something which is within someone's soul. It is inside you, this is what creativity is for me. You can entertain yourself in any situation, you can take inspiration from any situation; you're creative. That's what 'creative' means to me! You've got this passion for making things of analysing things.

11. Was the educational structure or the curricula applied in (name of university) as you expected it to be?

I've never done a degree before so I didn't know what to expect! But when I chose interior design I did not expect this. I think our course is really structural, as in architecturally based. There are lots of technical drawings and details, a lot of how's it actually going to work what's the electrical layout what's the reverse ceiling plan, you know, all these regimented definite things. Whereas, I thought it was going to be a lot more emotional a lot more what's the feel of the space, how does this make you feel? It's not that it's not that, it's just that's the way my particular year does it. Maybe there aren't a lot of people that think that way! They sort of think, "okay what's the brief, what have I got to do, I'm going to do it..." tick every box. Whereas I thought it would be a bit more like, the way I work, "what have we got, so what can we do with it?" I did not expect it to be so 'architect-y!' I thought it would

be a lot more spatial but I tried to make it like that, so I think the scope within the briefs are not so rigid you can't make them however best fits the person.

R: Are you happy with that?

Yes, it's good to have it, it's good to learn it because you know I am paying for education. Like I'm saying, this creativity is something which is inside you and I don't think you can learn that. Whereas, I'm not going to go pay for a fine art degree because I think I could do that with my eyes closed. Whereas, the technicality of this course I think makes it worthy as a degree. I think it is necessary as much as I complain! It is necessary.

12. How do you see yourself as an interior designer in the future?

In my own house, which I've built for myself, and maybe naked (laughing). In the near future, I know I have got a job in London with a design studio where I have worked for two years. That's how I see myself in the near future, in the office in London. But in the future, ideally I'd like to build my own place, I like to have my clients come to my house. I would like it to be a small firm, and also not just interior design, I'd like maybe to teach or council or something like that within an art-based theme, maybe art therapy...

R: What do you mean by art therapy?

Like expressing emotions through art, analysing problems and talking through them through a physical outcome. So, you're not speaking about them you're expressing them physically. I like that and I like how...it's your personal story of things. Maybe my interiors will heal people.

R: There is a major called healthcare interior design!

Yes, I think so. We live in these houses that all look the same, everybody's got Laura Ashley wallpaper, and I think it depresses people. You've lost your identity so it's something I want to bring back somehow, my own little contribution.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I like to work on my own, not because I don't like the way other people work, or I can't work with other people, but because I think I like things that are personal and I think it's very difficult to get a personal outcome from ten people. There has got to be a compromise somewhere and I want to design things that have no compromise. You know, I want things that can be as full as they can be. When you work in a team you always get someone who's too quiet to say what they think or someone who takes over. It's just the nature of people. Whereas, if you're on your own, there's no one, you can't *not* say what you want to say, you can be whatever you want to be on your own. R: Do you think working in life in general does not need compromise?

No, it does need compromise, life...

R: Especially working with clients!

Yes, I might want this lady to have grass inside her house but she may think it is absolutely bonkers, so obviously, she's not going to pay for it. So, there is compromise that way, and that's why we do have to work in teams at university. It is very important because it teaches you that skill. So, that's okay, she's not going to have grass, what can I do that's like grass? How can I get my own way without getting my own way! So, it teaches you a skill which is very important and I do think life is a compromise, but it is not as big a compromise as people think. You know, you can make it what you want.

14. Where do you prefer to work on your project? Studio or home or another place?

I prefer to work at home.

R: Why?

Just because, here it's not very relaxed. We've got these spin-y chairs and there are computers hissing in the background. I like to do work and then go and sit on the sofa, do work then go for a walk. Whereas, if you're here all the time it can oppress you a little bit. And also, our extraction from the main college, I don't feel comfortable to go in and sit in the café or go to the library really. I mean, I go to the library quite a lot, but the fact that our course is separate from the main building is something which I don't really like. I feel like we've just got our classroom and that's it. Maybe if we were in the main building I would happily work here, because there are different areas you can go to, but here I am all the time in this chair at this desk. So, there's not really areas to just change, do you know what I mean? Different areas to stimulate you, everything looks the same and everything's got lilac walls.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I think I have some good ideas sometimes, but I don't know how to put them into CAD.

R: So CAD is your...

Yeah, it's a big barrier for me. It takes me a long time to do the simplest things. The way it's constructed is not the way my mind works. My mind works very organically, you know, "what's it look like, how's it make you feel..." sort of thing. Where CAD is very mathematical, it's very right and wrong, and if you put in just slightly the wrong thing or you slightly press the wrong button it completely...it takes a long time for me to create what I want to create. And also, perhaps, because I'm not very good at it, I cannot convey what my idea is on CAD. Sometimes it compromises my ideas because we have to have it on CAD, but I have been working in different programmes like Google SketchUp and at work we use Vectorworks, which is far more simple than programmes they use here or AutoCAD. So, I'm trying but that's the biggest hurdle, I don't know to start projects on CAD very well. Sometimes when I

have these ideas I don't know how to start on CAD, I'll try to make a model or something like what I've done with this – to try to convey it in another way. I don't have a problem starting, but I'll do it a different way.

16. Art you confident sharing your ideas with your peers?

No, I don't really mind if something, if it's mine, it's my idea, I'm quite happy to talk about it.

R: would you like to keep it secret?

Sometimes I like to keep things secret...not on a competition [sic] basis, not like, oh I don't want to tell them in case they copy me. More like, "ooh, that's nice, I just want to keep that for me," sort of thing. [Interruption] Sometimes I keep things to myself, but that's not because I don't want to share, it's not a competition, it's just I enjoy keeping things to myself sometimes. Not in a shellfish way either, well maybe a little bit selfish, it's just like it's my little thing that I want to keep. Oh wait, no sorry, are we talking about in a project?

R: yes

Oh, no, no, I don't really keep things a secret. Sorry, I thought you meant just generally. In terms of a degree, if I've got an idea, I'll talk about and I want my tutors to give me feedback and I want my friends to give me feedback. I don't not tell people things. I think that's important for me, otherwise I'd just go made with my idea. I need some external force to say, "okay G! Stop now and go with this."

17. Do you like presenting your project in front of others?

I don't mind

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

For me, the most interesting part is the research and inspirational stages, but the inspirational stages last throughout the project because it's always changing, and even like now I have just presented something and I've handed it in, but I am still thinking about it. It's never going to stop until...I suppose if it was ever physically built it would have to stop. For me the research and looking into things is really, really interesting because I am quite nosy and I like to see what people have done. But I also enjoy the final presentation side. I like aesthetically laying something out. I like the visual quality of things. I like looking at what other people have done. I like the fact that we can sit in on other people's presentations and I don't want them [the university] to take that away, because I think that's important. It's also important that people learn to present in front of people. Which is something I had difficulty with at first, but I'm trying to not have. Yeah, it doesn't matter at the end of the day, but I like the presenting part and I like the research part, they're the most interesting.

19. Do you prefer thinking of the holistic picture or the details?

No, I am definitely a big picture girl, I am definitely an emotional person. I like to think of the overall ambiance of the place in the aesthetics rather than am I going to use a 2mm screw or a 4mm screw. That kind of thing makes me feel really, really sad and I don't want anything to do with that. I'm a big picture girl, I like the big picture.

20. Do you prefer to solve problems and find solutions through words or practically?

As in, would I rather write a written evaluation or make lots of little models?

R: Yes

Both, can I say both?

R: Yes

I think both are helpful to me, because I like to make little models and I like to visualise things. But I don't always have to physically make a model because I've got quite a good imagination so I can physically imagine what it would look like. I also find it very beneficial to write things, I write a blog, I write a diary, I ramble on...
I think they're both important.

21. Do you prefer gathering lots of possibilities or deep facts?

I like to be as varied as possible. I like to think about the widest possible range of inspiration. I wouldn't like to just look at the basics. Initially, you know, you just look at the basis and you think, "ok what do I need to do? What does this space physically need to function as?" but then as I say, I like to look at films, I like to look at the sunset, to look at rubbish on the floor. I think everything is important, as wide as possible. That for me brings about the greatest outcome.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I like to be as new and risky as possible.

R: Do you have lots of ideas but you don't know to evaluate them or do you have a strategy to evaluate them? How do you choose for example, I'm going to use these ideas, but I'm not ignoring these ideas...

When I've got lots of ideas if I like them all, I'll try to incorporate elements of them all into one thing. But usually I have got all these ideas and then I find flaws in one of them and then that makes me go onto the next one, you know what I mean! Either I like lots of things and incorporate them all or I like things and then fall out of favour with them and then go onto the next thing. I don't really have a problem with that! I never feel like "oh god I've got too many ideas," it's like, "ooh that's so exciting, I've got so many ideas!" (laughing).

R: Do you prefer coping with the latest technologies in the field or applying them, the latest ones?

No absolutely no, the newest thing doesn't do anything for me. I can notice it, I can appreciate it and say "oh my gosh! Wow look what they can do!" But I wouldn't be like, "okay so, I want to do that!" I am a bit anti-technology, so maybe that adds to that as well. I really have no passion for the newest things, but I have got passion for the most relevant thing to what I'm doing.

23. Do you prefer to organise your work or to work freestyle?

No, free and following my passion.

24. What is your motivation for your project? People or tasks?

I think I am quite self-motivated, but like I'm saying, because I'm so self-motivated sometimes I can run away with myself. When someone, say 'S,' comes and says, "okay right, let's go with that," that's really beneficial to me because you know we've got to get stuff done, we can't just live in my dream world in my head all the time. So, I don't usually lose motivation, but sometimes, I would say I'm too motivated but, it's good to get [input] from other people as well.

25. What is more important to you: following your heart to be satisfied with ourself or convincing your educator and following your head?

Self-satisfaction 100%, well 90% (laughing). At the end of the day, I've come to university to get a degree, so they need to be pleased to give me the marks. But at the same time I don't want to lose my integrity as a person to get that mark, or as a designer or as an artist, to get that mark. I'd rather be true to myself and my thing and not get the mark than compromise too far or just do something I am not really passionate about just to get a mark. I'm not really like that. I would probably fail rather than compromise too far. But not in an arrogant way. I don't know, maybe it is arrogance. [Interior design] is something I'm passionate about, it's something I know I want to do. There are quite a few people on the course who

are like, "okay, it's just my degree, then I'm going to do something different afterwards." Whereas, I already know who I am and what I want to do, at the moment. It'll probably change in the future and I'll want to stay true to that. For me, I need to be pleased with it, even if they think it is amazing and I am not happy with it, I'll change it.

26. How do you perceive criticism? Tactful or direct?

Tactful, I would say.

27. What is the social environment that encourages you to work in groups?

I like to talk with other people, I like to feed from other people's input. I like when we have crit sessions or when we have student reviews, where, say you were my tutor, we'd sit down and talk about it then you'd write me out a form and I could work on that. I find that very beneficial, but actually working in a team...I'm not a fan, but I will do it.

28. What is more important for you: the creativity or the success of the place?

I think both are very important, and I think if something is successfully creative it will be successfully efficient for the place. Do you know what I mean? I mean, if something is successful for me, it's also creative. It evokes emotions, it evokes reactions, really rather than emotion, just reaction. It makes you think. But if things are poorly designed or unsuccessful it's because it hasn't got enough creativity behind it. So, I think you need them both or they relate to one another.

30. Do you prefer working following a structure or being spontaneous?

I am a free person

31. what kind of environment would you like to work in? An active dynamic environment or quiet a serious one?

Both at the inspirational stage, and at the physical working stage both are important because you will need to think about your personal ideas, but you will also need the external inspiration so it's good to be in busy places, go for a walk in the city, or to a concert, whatever, it's good to be in noise. It's also good to be quiet and think about your thoughts. I spend quite a long time in quiet places but I also can meditate in noisy places. They're both important, but I think I work better in a quiet place or in a place where I can select the noise, where I can put music on or the telly. Where, sometimes I find it more difficult to work when there is lots of external chattering that I've got no power over, someone's bitching here or someone's talking about the latest episode of Coronation Street over here. And because I have this crazy analytical brain, I can drift into their conversations or I can focus on what they're thinking which will then affect my thoughts. That's just the way my brain works unfortunately. That's why sometimes I just need to be on my own in quiet.

33. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I think it stresses me and turns my mind off. I think getting a brief excites me more. I go do loads and loads in the beginning and I'm really passionate about something. But when it comes to the deadline stage, it's like, "Okay, you have to *stop*, now! This thing is going to end; you're going to hand it in and that's going to be the end of it." That doesn't excite me and that stresses me a little bit. I will procrastinate, I'll do anything else, other than do my work.

R: For a while?

For a while, yeah.

R: Then you come back to it?

Yeah, then I go back to it, and I say, "come on, you've got to do it!" But [deadlines] are important because within the working world the clients want their house ready for Christmas day, or whenever. You've got to do it. And I think because I'm a bit anti-education, anti-system-education, not education in a broader sense, in-a-going-to-school sense, this notion of a teacher telling you you've got to do it, I'm a bit like, "g-g-rrrrr, I don't want to!" But if it's a client who wanted me to do it because it's their own personal thing, then I'm happy to do it. I'd love to comply.

R: What you've presented today shows lots of thinking and also working.

Oh, good!

R: Can you explain for your project, for example when you've done the model, the three or four models you have handed in, what process you have been through to complete them?

I started by making it out of Balsa wood, and I was going to carve out the recess for the lights. I was going to have little strip lights and it was actually going to light up. I was getting really excited about this, but the technicalities of it and the deadlines I had...I had ordered the Balsa wood but it hadn't come in time and I had two weeks to finish it, so I had to start again. So, I got mount card and just cut it out with a craft knife, then this reflective stuff is like a sticky-back sheet, you can just cut it quite easily and stick it on. It's really, really quick to do. But I knew that I wanted to make a model because the project wasn't just a physical building it was something which could change, and that was integral to the design. So, I wanted it to be a little scale model that people could physically pick up the bits, like a sort of a game. I got the inspiration from a game, of the little people like little chess pieces were part of this game. I also didn't just want the cube and the people, because like the elements, it's interactive; it's also interactive with the city. So, it was important that I incorporated some typically Amsterdam townhouses with the shape. It didn't take me very long to do but the thought process, I was thinking, "I need to do this to show this, not just because it looks nice!" It has to look nice and it has to perform a function.

C) The Six Thinking Hats activity:

R: Look at these pieces of paper and imagine you're your powerful imagination that they represent hats. There are six colours: white, black, blue, yellow, green, red. Each of them represents a different way of thinking. The red represents feelings and intuitions. Green is creative thinking and possibilities. Yellow is positive way of thinking and positive possibilities. Blue is managing process and time management. Black is looking for the risks and cautions, is it going to work or not? White about gathering information. I want you to order these six thinking hats according to your way of processing and doing your project. Take your time.

1. Green: I've said "Green: creative thinking possibilities" because as soon as I read the words of the brief, I'm automatically "creative thinking possibilities." I read, 'cube' and I'm thinking, "okay, so what does 'cube' mean to me, and these other words come after it so straight away, it's creative thinking.

2. Red: Then once I've got all these things I'm like, "okay, how does this make me feel, how do I want people to feel when they interact with this thing?" Then the organic thought process within my mind, of my feelings, I feel that [the design] will work, or I feel that people will interact [in a certain way].

3. White: Then I gather more information, as much as I can get my hands on...

4. Black: And then I'm like, "okay, so what's going to work in all this stuff?" Then I think, "ooh, that won't work, or that will work." Then I'm looking...it's not necessarily a negative black here, I'm just discarding stuff that's not going to work.

5. Yellow: Then I've been positive about what I have, what has come out of this 'what's-not-going-to-work' sort of thing.

6. Blue: And then I think, "okay, so how am I going to manage my time and get through this." That's the very last thing I think about when it should probably come at the very top, but it's just completely alien for me to think like that. I wish it wasn't sometimes, but it is. That comes at the very end for me.

R: Okay, so green, red, white, black, yellow, blue. Thank you so much G. It was really nice; it's my pleasure to talk to you.

Thank you! You too. Good luck with everything.

Student's code: Ja.L

Institution (1)

Date: November 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

Because when I was in my foundation course I was looking to different spaces and how people interpret with them. I found that really interesting. Different things and what you can put in the space!! How it change!

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

Just because definitely L. is a fantastic city there is a lot of potentials, also there is a future for jobs. But I love the city anyway. I think the college I have liked it very small, especially in that course there is no many people so it is easier to speak to people and you get a lot better relationship with people I guess.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I think my interest is definitely lay in like hospitality, so I like restaurant design and hotel design. Skills wise definitely I was strong in drawing I think and my computer skills getting better now to doing it year and years.

6. How would you describe your experience studying interior design? Why?

It has been good, as I said there is less people and you can have properly speak to tutors and meeting them and one-and-one experience is nice.

Very challenging and lots of math in it can be very interesting and have more architecture as well.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes it is supportive because we have tutors inside which is just over there, it is easy to speak to anybody, bounce each other ideas.

I would not say it is inspiring because it is not the nicest place you can be in and you can do more with it as a place. As interior design place it could be more colourful and more design on the wall and inspiring pictures.

Sometimes yes and sometimes no, it is depend on people you surround yourself with, because they will be with you all the time and will inspire you with new ideas.

So yes Encouraging because you see other people work and how they work. So it is inspiring as a social interaction, and useful environment and not encouraging built environment or space.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I think we have been taught to write a page like a development plan in the beginning of every project. We can work out how much time we can gives to each part. Give yourself two hours to do this section makes planning time much easier. This is the way I find it easier anyway.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

I find it clear to understand the brief, and in the studio they explain it, and I go through it again as well.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

There is always things challenging in projects, but for me I think it is easier to use bubble diagrams and drawing things. I need to put what I am thinking on one page which I find quite difficult sometimes.... I am very visual person I think!

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I think I have understand some things of what we have been given, it has been lot more architecture on it now, so its lots of preserving the audients and things. So, I remember Steve did is all about the structure of building and how lights bolts skirt together and which is not really work I am interested in that. It does linking anyway because that what buildings all about. So there is a link for everything. But I was expecting more decoration stuff.

Do you think it needs more decoration?

It might be an option, it is important I think.

12. How do you see yourself as an interior designer in the future?

The end result to live in home and company, I would love to have that. I think to have an idea. As I am interested in hospitality and restaurants and hotels design it is good to work in a company maybe I have to unify I can see how they work and see if that right for me. Then progress the thought of thinking.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I think obviously prefer to work on my own, just because obviously everyone got their own way of doing things and I think it is easier. I do like working on team I am a team player, got so many opinions because you got different people working together it can sometimes go wrong and sometimes but obviously you work with that.

14. Where do you prefer to work on your project? Studio or home or another place?

Home because, because I like being in my own surroundings and I have got resources and printer at home. So yes I like to work from home most days.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I think again I love drawing spider diagram where to put everything down, bubble diagram so I can see it clearly what I am thinking about.

16. Are you confident sharing your ideas with your peers?

No I think I am confident enough to present my work front of my friend. Yes, I think it is a good idea to take their opinions and if they think it is good or not.

17. Do like presenting your project in front of others?

I hate presentation.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.

- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I do enjoy drawing sketches of the ideas, because when you got so many ideas in your head and you can sketch them and you can see how they could appear so this is my favourite part.

19. Do you prefer thinking of the holistic picture or the details?

I think the holistic picture, because I find it more interesting.

20. Do you prefer to solve problems and find solutions through words or practically?

I think practically, because again you can make model you can visualise it and you can see if there is a problem with it or not. Where is if you writing it you can't really see it as well.

21. Do you prefer gathering lots of possibilities or deep facts?

Gathering lots of information because it provide a wider view of what you have got then you can analyse it all together and then you can make a decision of that.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I think in the past I have played it safe, and I have been taught to take a risk and see what it is end up. I think this is definitely what I am trying to do. It is different if it is high or low risk, if it is not going to work I would not do it even if I like it, but I am willing to take a risk.

I don't think so I am looking to the latest things in technology, so it will be more experienced technology I think.

23. Do you prefer to organise your work or to work free style?

Organise my work.

24. What is your motivation for your project? People or tasks?

It depends on how much you interested in the project I think. From the past projects if I like the look of the project I can be self-motivated, but if I am not keen on then I need someone to motivate me to start it I think.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think both important, I think for me it is my own satisfaction because you want to be proud of your work you want to be happy with what you have produced. Their appreciation is important as well but my main satisfaction I think is more important.

26. How do you perceive criticism? Tactful or direct?

Tactful and I feel nervous when I give or perceive criticism.

27. What is the social environment that encourages you to work in groups?

I can work in team to have different opinions just as discussion.

28. What do you like more: starting or finishing tasks?

Finishing.

29. What is more important to you: being creative or being organised?

The creativity standard of my ideas because I think everyone trying to be creative as they can and I think that's what we have taught to do to be creative as possible. Just because being interior designer it means we should creating new ideas that never been designed before.

How you define creativity?

A lot of things when I think about it! The use of different materials, lighting, colours.

30. Do you prefer working following a structure or being spontaneous?

I try to do a plan in the beginning of the project, but sometimes it would not follow. Project like that. Because half the project I can think of something out and go on that and sometimes it can change it usually works like that.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I think a quite environment because for me personally to just I do like quite to just think and get on with my words worse. At times I would like being in active environment again with all my friends so I can discuss ideas so both. I think quite ideas in the project thinking of new ideas and you have ideas in your head I think here is when..... I prefer being in an exciting environment like brain storming because talking is a really good environment, and in a quite environment when I am doing sketching and computer work.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Stresses me definitely but it does not really turn me off I think it makes you more aware about time. I think it nerve me more to finish my work on time

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

I do these steps towards the end.

Blue: Managing your time doing a plan and trying to stuck to it

Green: Creative ideas is one of the first things you think about when you look at brief

White: you start thinking about information behind your ideas, examples, and visions

If it could work your ideas

Red: Mine in sitting my own intuit just to hunt what I will go with it.

Yellow: then I have done my design then you have got make me models or design

Black: Then you realise things going wrong

Students code: Je.L

Institution (1)

Date: December 2013

A) Supplementary questions:

1. Why did you choose to study interior design?

I think when I was doing A level I was sort of thinking about lots of different things, what I can do with my art degree and sort of other subject that I did. And I just saw interior design was one that I was interested to go into.

2. Why did you choose to study interior design in the UK (for international students)?

My dad is British and my family lives in the Middle East, but we used to go to the UK every year in the Christmas to see my dad's family. Then my sister came to study in Huddersfield then I wanted to come to England to study

3. Why did you choose to study at (the name of the institution)?

I looked to different interior design courses around England, and L. is close to where my granddad lives, and it just appealed to me it's the city.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I was always interested in redecorating homes and helping my mum like move round the furniture, but I have just thought maybe with the art skills and drawing see if I can do that like drawing skills like interior design drawings in a professional way.

6. How would you describe your experience studying interior design? Why?

It is different to what I thought it would be, I thought it will be one of the decoration courses that learn about decoration, fabrics, textiles, materials. But its a lot more independent than high school and you know what do you do, and it is more about architectural in terms of drawing.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Some time, sometimes it is really useful to have different opinions and sometimes there is lots of distractions. Sometime if there is a deadline and everyone is doing their work it's ok. But if some people are sort of doing their own thing with lots of people around it depends on what kind of work you are doing could be a distraction sometimes.

Yes, when we come in here there is always people around you, and if there is always something you stuck in you can always ask for help and they can help you in the project with CAD or drawing you can always ask.

Yes, because everyone is working so you will feel like you have to work.

What about creativity? Sometimes when we have lectures and when we look at different artist and when you see the other people's aspiration, it does encourage you and it might give you a creative idea whenever it gives us.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Not really, we get the brief then we do a lot of time on the research then we think about it. After that it is about how you process of developing and do things. So it is you do your research and do your initial idea then you do your design. I never really have a timeline or a schedule.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Usually is clear but sometimes we got a lot of briefs in the same time, like in the beginning of the year we have been given all of our briefs sort of in the same time and it was a little bit overwhelming about all the briefs we had to do. But it was clear you know we get lectures about it and they talk to us about what we have to do and we get a brief and we can read through it and we can go back to it if we don't know what to do.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think because it is kind of independent work there is always your challenges to face, but I just think you know there is always... you are trying new program and trying different technique of drawing or trying different style of layout anything you are doing, there is always help from everyone else. Your past projects, you can reflect on and you can look on and you can build on what you are doing.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Kind of I was expecting something different or something more interior decoration and a lot more how we get taught how to do things like school but it all end up handed sort of.. It is quite different to what I expected. I am glad because in the high school you know we have learn how to do things and you can see how you do things if just independently and I think it's good.

12. How do you see yourself as an interior designer in the future?

Hopefully an interior designer, I am not sure what sort of aspects interior design I want to do. I want to work in the residential sector but we have not taught a lot about it here. I think I have to do it independently before I am going to do it professionally.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

It's different sometimes I think it is difficult to work in a team because you expect input from everyone and sometimes if people are not pulling their way of people doing the things they are supposed to do, you have to fill in more than the work and stuff but I think solely, maybe better both sometimes and solely is quite good because you can sort of have your ideas and have your view but in the team you can have others help also. It depends what the project is and who is in that project.

14. Where do you prefer to work on your project? Studio or home or another place?

It depends what kind of project you are doing, for example now for my dissertation I found it difficult to work here (studio) as with all the writing I need to do it a little bit difficult to do it here when people are around. But when I am at home it just quit and I can write down everything. But when I do a project where I have to draw and design you know at current texture I think it might be good to be in a good environment within the studio because you can get everyone else's input and they can say to you how you can put that there or use this tech, so it's good to be part of the studio.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Usually we have tutorials with tutors and staff and we usually tell them what we have as ideas and they give us a little more input and maybe you can do this or that and then from the research and our ideas we usually do like sketches or we do program design like mood boards you put different ideas do you have and the different things you think like a bubble diagram, so you can gather everything then you can choose and start the project.

16. Are you confident sharing your ideas with your peers?

Yes, I have no problems.

17. Do like presenting your project in front of others?

I think yes quite good, I think presentation stuff is sort of as always been ok, because you are using people ideas and their opinions of what you are doing and you know it can be critical sometimes and good sometimes and it can sort of shape your project and how it goes along the way.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

The research is the most interesting because you find all these different arched you never seen before and so many different products or inspiration to what design. You find more and discover thing you would not normally have and broadening your knowledge.

19. Do you prefer thinking of the holistic picture or the details?

Holistic I think, because if you see the holistic thing you can see the whole then you can envision what can be like then you can think about the details. That is how I do first and what the outcomes will be and then I will go on and do the details how going to be made what materials what colours things will be inside and do it as you get the details.

I prefer the holistic picture of the project

Not really no I think just sort of as you go along the way, actually my project I am working on now my initial ideas was to have soothing that floated on the water and opened up and had different flat form but I just think like coming to design it is just difficult to sort of have a fixed shape and then to move it and to have it function and open up and you know with different materials how to actually how to manually do that is just a bet difficult sometimes so I think like as you go along the way you just discover things are possible to do and just a bet difficult to design or different materials.

20. Do you prefer to solve problems and find solutions through words or practically?

I think maybe with words, I think it depends. Usually I have an idea in my head and I like to write it down you know as words and this what I might do. I think it is easier that way as doing it practically and design it. I think that what I would do literally then experience.

21. Do you prefer gathering lots of possibilities or deep facts?

Lots of information about the basic idea in the project, and I think the more research you do the more ideas you get to sort of help you in the project.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Usually safe way, but Steve he sort of help us to branch hard a bit more challenge things as he gave us as a cube shape and he said you know if you first created you might can change the shape or change the size or we could have move and I think and it is so much easier when to be in a conventional safe way. But when you sort of challenge the risk you find it more creative and original.

I've never really thought about like latest technology or what to choose for interiors.

23. Do you prefer to organise your work or to work free style?

Free but I start develop my planning skills.

24. What is your motivation for your project? People or tasks?

A little bit of both sometimes if you don't feel like you want to do work you have to be in an environment where you see other people working and working hard and then you can work and you know in that kind of environment you have to do the same. But sometimes you have that high motivation and working in your own and other things distracting you or distract yourself.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think a little bit of both I think my own satisfaction if I am happy with my work then I know that I have done enough and I have the hardest to do it. But it is always good to feel rewarded and feel like others appreciated as much you do. Because when you get others opinions you think because usually people like their work they have done it because they came up with the idea but if others like the ideas as well then you know that it is a good idea or good design because other people will think the same way.

26. How do you perceive criticism? Tactful or direct?

I tend to be diplomatic, says the truth in a soft way.

27. What is the social environment that encourages you to work in groups?

Cooperative and in harmony.

28. What do you like more: starting or finishing tasks?

Starting is more interesting.

29. What is more important to you: being creative or being organised?

Creativity it has to be original it could be original or unique and different.

How you define creativity?

Anything can be creative, I mean anyone can draw a picture or pick something on it or put something in it could be different. But I think everyone have different taste and different opinion and different ideas and there is no agreement on one thing but there is no specific category or character I can think of stands of being creative.

30. Do you prefer working following a structure or being spontaneous?

Sometimes, I think it is a good idea to follow structure plan so you can know where you are if you are a bit ahead or on target. Me personally I think I am too lazy to follow it.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Depending on the situation and the project, I think now we have got two completely different projects in the same time and we have dissertation to write and we have cube to design. I think when it comes to the writing and seriously sitting down and reading books and write it is better to be in a serious environment, but I think when you need inspiration and creative thoughts and people opinions sort of good to be in active environment.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Usually, it just stresses me out, I think at the beginning it is when you have all the ideas and then you are so excited to do it then it's like anti-climax because you have all the ideas and you just wait for the deadline and then you stressed out and then you know your mind kind of turns off then you really need it to turn on again and I mean sometime in the last five minutes I come with a really good idea that happened in the last minutes.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

1- White: Information available and look at what you have and you look at existing artist and existing design to start that of.

2- Green hat: Alternatives and creative ideas because with research you get all alternatives and ideas you can do and compare it with all different once and you find out your creative ideas.

3- Red hat: Intuition and feelings, your feeling of what you like more and what you think is the best and that what I usually do.

4- Blue: Then I think of managing process the I put it in a perspective and say my research done my creative ideas and now I need to do this and I sort of managed how I am going to do it.

5- Yellow: Then and I think of the why something might go wrong and you think of what I can do and what you can't do

6- Black: Then cautious of something going wrong and solve the problems.

Institution (2)

Students' code: Ag.G

Institution (2)

Date: 6 March 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

I wasn't sure what kind of design. I always wanted to do design, but I wasn't sure until a couple of years ago if I wanted to do interior design and then I realised that I could do it. And I enjoy it a lot.

2. Why did you choose to study interior design in the UK (for international students)?

I am from Latvia. To start off with, I came here five years ago after I finished school in Latvia and then I came here for college. Just for education in general. I chose the UK, because it's part of the European Union so it's easier to migrate, and I knew English. I didn't know any other language and I liked the idea of the United Kingdom. I think it's strong in art. To do with design, it definitely is. I think it's better than where I come from, anyway.

3. Why did you choose to study at (the name of the institution)?

I wanted to go to Scotland to start off with. Just wanted to. No real reason. And when I started asking around, because I used to live somewhere else in the UK, I was asking my tutors what is a good school in Scotland and they said G. School of Art. So I came here to see it, I really liked it and I applied to it and got in.

4. Which year are you in?

Second year.

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I suppose I have a sense for interiors. I can picture interiors in my mind without actually having to draw them down, and then once I see it in my head I am able to draw it, actually with my hands.

So you like free drawing and imagination and 3D?

And also, if I see an accessory of interior, I can easily put it in my head and imagine it in context. I thought everybody could do it anyway, but no.

Because it's not that everybody can. I'm sure every interior designer can do it and that's the kind of skill interior designers should have.

I've got your point. You thought it was normal, but then you just realised it was a special talent that you had.

Yes, probably. I wouldn't really say 'talent', but a skill.

6. How would you describe your experience studying interior design? Why?

Very interesting. (Why?) Quite exciting. It's very open. As you do a project you get a lot of guidance from tutors and that's how you learn. And that form of studying suits me well. I like it. I enjoy it. You can do whatever you want, basically.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes. The new building that we've got, it definitely has to do with help because it's so beautiful and it's very inspiring. And everybody is together, so you can always discuss with other students what you're doing.

It also encourages you to study because you can always find yourself a nice spot to sit down and work. It's a working environment, this place. So, it's completely different. If I stayed at home, I would get distracted all the time and do something else. But once you come to the studio, you feel like you want to do work, instead of doing something else.

Is it inspiring in a creative sense? Do you feel like a new creative idea comes when you are in the studio or somewhere else?

It depends. (No relation?) Not really. It's more to do with the studio making you work, it makes you do more, develop, things like that. But it hasn't got anything to do with an actual idea coming.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

It's very difficult with design, I think, because if you are not feeling inspired, you are not going to be able to do anything. I suppose maybe for more organised people it is easier to manage their time, but for me it's not. If I don't feel inspired, I can't do anything. But once I do feel inspired, you can work non-stop until the end of the project.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

No, I don't, no. I mean, yes, I do find tasks clear and I don't need lots of effort to understand. Because with the art brief or the design brief, there is no right or wrong most of the time. You do what you feel is right and sometimes you need some help to make it more realistic, more practical. To make it work you need help, but actually there's no right or wrong.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Not really, except just making good work. I don't know. Not really, nothing. Nothing is more of a struggle than anything else. It's all bearable. It's different in each project, but it's the same in each project. I get an idea and then I develop it, do my research and things like that, or do research and then get an idea. It's always different, but it's always the same.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

It did. Well, at first, I was maybe frustrated, or surprised, not in a good way, that it felt like they didn't put enough pressure on us. They didn't give us enough work to do. It seemed like doing nothing. But actually, it's not that way anymore. I changed my mind very quickly. So that was just the first impression, but then I realised it was not that way.

How long did it take you to change your mind?

A couple of months. After the first project. When we did the first project and everybody showed their results, I realised, 'OK, now I know'. Because it's not just about how much pressure they put on you, it's how much work you do yourself. If you do a little work, it's not going to be very interesting, but the outcome is not going to be very good either. So the more work you do yourself, the more guidance you get from tutors, the more experience you get, so it's up to you.

12. How do you see yourself as an interior designer in the future?

I guess far into the future I would like to have my own design company, like maybe a little one, not necessarily a big one, or work as a partner in someone else's design company. I'm not that ambitious, I just want to do what I like to do. As long as I can do interior design and be creative with that, just be myself while doing it.

I don't really care about the status. I care about just doing interior design.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

It's both. Both of those experiences are interesting and exciting.

In teamwork, I don't like upsetting people. I don't like saying to people that I don't like their ideas. Sometimes you have to do it and you have to do it sometimes and you have to have an explanation for why, but it's still very unpleasant. You don't want to upset anyone. With independent work though, what annoys me is that sometimes you cannot look objectively at your work and you cannot get that outside opinion if you are working on your own, unless you intentionally come to someone to ask their opinion. But in group work that's a good thing because if everyone's got a good sense of taste, good taste and they're good team players, they can work very well together.

14. Where do you prefer to work on your project? Studio or home or another place?

I guess in the studio more, if we're talking about university. If I had an office space in my home, I wouldn't mind working there either. As soon as I start feeling inspired for doing a project, it doesn't really matter where I'm doing it.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I suppose it all starts with an idea. Then maybe I would go on the internet and look for some examples of that, maybe to make the idea fuller, to get more ideas, small ideas around this main idea. Then probably start sketching.

I had this first idea about making a space within a space. And then I started looking into examples of things like that on the internet. I started off with a plan and I was thinking about the most successful way through this piece, and different aspects of practicality and then sketching it all out. Doing more research, finding more examples of if it actually works in real life. And then drawing actual views with furniture, looking for furniture as well as other details.

16. Are you confident sharing your ideas with your peers?

Not really, no. I feel quite confident. Not in a way that I feel confident about my work, but I trust my peers and I believe in other people's opinion. And I think you can always take something from what people say to you, so I don't think about my work being good or bad, I just want to hear other people's opinion about it. And I'm never going to hear it unless I ask. So I don't mind sharing my ideas, not at all. I find it quite exciting.

17. Do like presenting your project in front of others?

I like presentation, but I have to prepare myself well for it.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Can I just choose the one I don't like? Because most of those things I enjoy. I don't like working on the computer. (CAD?) CAD yes, but it also depends, because for making presentations I like working on the computer. I just don't like the 3D, making 3D. It takes years on the computer.

19. Do you prefer thinking of the holistic picture or the details?

I think the bigger picture always comes first, and then the detail.

20. Do you prefer to solve problems and find solutions through words or practically?

I think both. Because there's never enough just talking about it and there is never enough just looking at it. It has to be both.

21. Do you prefer gathering lots of possibilities or deep facts?

Sometimes it's one, sometimes it's another. For example, if we design something I'm not familiar with like a music studio, I don't know anything about it so I'll have to go and do research and then I get an understanding of what it has to look like, essentially. But with an office, I know what an office looks like. I might do a little bit of research, to look at other offices , beautiful offices that work well for designers, but that's a little part because I already have some understanding of what a Because I'm a designer I can even imagine what I want my studio to look like and build that up.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Take a risk I would think. I think it's always a good idea to try something new. Technology, again it depends. It's not that I don't like new technology. If it works well with the interior and if the client requires it, wants it, no problem. If it works well together with an interior and if it makes sense to put new technology in the interior, I don't see that...

23. Do you prefer to organise your work or to work free style?

No, I don't. I definitely don't, no. It's not that I have a passion for older things either. I just like staying realistic and see what fits well. Just do things that make sense.

24. What is your motivation for your project? People or tasks?

In university? For now, I have never really worked as a professional yet. Well, in university, my motivation is getting a higher education and being successful with the grades, so that in future I can present myself and have more knowledge.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think maybe the educators' appreciation is part of my own satisfaction. If I feel strongly about what I've done myself and then I ask the tutor if it is actually good – and they're professionals, they know what they're talking about – I trust their opinion. And if they say that it is actually good, it's very satisfying. For example, if I felt strongly about my project and I came to the tutor and they said, 'No', I'm not going to feel good about my project anymore. So their appreciation, their approval maybe, it's part of the satisfaction that comes.

26. How do you perceive criticism? Tactful or direct?

Fine. I don't mind. Because it's a source as well. You get new ideas because sometimes, as I said, sometimes you can't see your work objectively and you need someone to tell you that something is not working.

27. What is the social environment that encourages you to work in groups?

When all are together working in the same place.

28. What do you like more: starting or finishing tasks?

Finishing tasks.

29. What is more important to you: being creative or being organised?

That's an interesting thing about interior design - that it has to be both. It has to be amazingly looking but also very practical and functional. And that's what I like about interior design as well.

30. Do you prefer working following a structure or being spontaneous?

Yes. No structured plan.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Maybe not active, vibrant environment, but not too quiet either. It could be quiet, maybe some people are around. I don't really mind anything. Both can be quite...

Not unnaturally noisy, no. It could be quiet, it could be medium or not very noisy. Nobody likes noise.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

It definitely doesn't turn my mind off, but it doesn't stimulate my ideas either. It just makes you work and do work. Do anything. If you're in late, it's probably a deadline. It makes you do work and it's not necessarily always good, so it's good to start early.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

White, green, blue, black, red, yellow. Do you have a specific explanation why you chose this order?

I don't know. It's just fun. I thought if those are the things that occur when working on a project, but that's the chronological order.

Students' code: Es.G

Institution (2)

Date: 7 April 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

It's one of the best art schools in the UK. It's renowned for its high quality work and it's very strategic to get into, so the fact that I went here is a really good thing.

4. Which year are you in?

Second year.

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Personally, I'm very organised. I love interiors. I've got quite a big drive for business. I'm really passionate about interiors and therefore all my other skills and everything else that I've done in my life has driven towards that, aimed at that. The jobs I've done have been part-time. It's all about high standards, high quality and doing the best interior design. I did a lot of work with events and so each time, every event you feel that's putting in an interior that's for that event specifically, either a birthday or a wedding or something, it's always different, you're creating an environment, you're creating an atmosphere. (It's interesting for you?) Yes, and I sort of work on that, go with that.

6. How would you describe your experience studying interior design? Why?

I really enjoy it. It's really up my street. I'm quite into computer work more than doing lots of drawings. I mean, other art schools do more model-making and drawing and technical drawing, so I thought I'm very much into the computer side, so it's good that we're more computer-based.

(So you prefer that?)

Yes. It's very much the right course for me. I think Edinburgh, the start of the year, the first year's always just do model-making and they do drawings and they do stuff that's not... they're not on computers until the second year, I think. So it's really good we had the first year to do computer work and then in second year you've got skills from earlier work and you start drilling into that and so you think more into your design, rather than worrying about how to get there.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, it's good. There's always a tutor you can ask for a tutorial and you have your set days, but you can sign up to a tutor who's doing other year groups. You can always ask questions, if you just email before. I think the more you're in the studio the more friends you have. You can speak to people more and there's always someone in the studio that you know you can

just talk to and ask them questions. It's good to be friends with your year as well as the year above and the year below.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I do make my own time plan, yes. Once I have an idea I start working backwards. So I find the peer review and then I work backwards, how many sheets I need to do, what day start rendering, I start setting out things. I make notes throughout the project of what I need to remember for my final review and for making up the sheets. And then I give myself a couple of weeks or as much time as I can to do the actual designing.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Sometimes, it comes straight to me and I have an idea and it works. There's always things you come across along the project to find out whether it's going to work or not, I suppose, hurdles. But once you're through them, that's fine.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Time management is quite important. Yes, getting your idea fixed and conclude it and saying, 'Right'... Now, I've got to stop thinking about it, 'Start designing'. That's something you've got to do. Try and save yourself two days to design what you're doing and not longer and let it come to me. I mean, it's kind of forcing it a little bit when it comes to designing and it's drawn and actually working. You'll actually have lots of time to think about it. I have to just do it. It's practice.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

It wasn't surprising, but I didn't really think about what to expect. I don't know.

So you didn't have really a specific idea before you started to actually study?

No. I knew it would be very different to school. It's not like other courses, like in G. Uni you have set things to do and set days, you've got a timetable and such. And being in studio, you've got a studio day and it's your own time and you sort of organise it yourself, so it's much better that way because I'm good at organising things. It's fine. It works for me.

12. How do you see yourself as an interior designer in the future?

I have confidence that I'll manage. Yes. What do you mean?

For example, working in a company?

Yes, I see myself working in a company. Perhaps, much, much more in the future working for myself. But I'll see what's happening just working in a company. And getting experience from that and working on bigger jobs for bigger companies and designers. If you work in a company you have more chance of doing that before you start doing your own thing. I think you can learn things from that.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I think individually. Although I've heard people saying, 'A designer never works alone.' I think our team work is the criticisms we have and the tutorials we have. So when we have a group review, that's the team work, that's the team looking at the project and all thinking and all giving you advice on it. And you take in what they say rather than us all currently trying to do something together. And everyone has their own preference to a name or ... there's conflict about that so it's easier working by yourself. And then the group work is everyone's opinions and the feedback and advice you get in those, so that's their contribution to your project and equally you give your contribution to their projects.

14. Where do you prefer to work on your project? Studio or home or another place?

I have always worked in the studio. I haven't got the program on my laptop so I don't know working at home, but I think the studio is a good place to work. It means you have access to tutorials and other students in the studio.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

You've just got to say, 'Right, now, I'm going to start designing it and start doing it. And once you've started doing it you can get into a thing. (Sketching?) Sketching just happens. When I have an idea, I'll just draw it out. But it's a bit weak, sketching onto the computer program to make visuals that are accurate and to scale. So that's the hardest point, but once you're on it, it's fine.

Generally, just eliminate the ones that are not necessary. And then drawing helps. So when you start drawing you can start seeing what works, what doesn't work. And those wee things

you've got to drop, are dropped and stuff. But I mean everything's changing throughout your project, like slightly, everything's evolving.

16. Are you confident sharing your ideas with your peers?

No. Today, I didn't have very much to show. I only had my sketchbook of things and that's not very clear. But talking about things helps in yourself to decide what's right and what's wrong. And hearing people was really good.

17. Do like presenting your project in front of others?

It's always good to present. It's always good to hear what people have to say and even if you have to describe it and not show very much visuals, but the visuals always are necessary.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I really like research. Research is really good because you start to get all your ideas. I think my favourite part of the design project is adding in lights and textures, so that's the last thing when it really comes together at that point. On the computer. I find hand sketches hard but they really refine my ideas. But they really slow up what I'm doing. I think research and then the actual, final products, when you start putting things together and it looks good, that's my favourite bits.

19. Do you prefer thinking of the holistic picture or the details?

Whole picture. Yes.

20. Do you prefer to solve problems and find solutions through words or practically?

They're equal. They both help, so depending what project. (So both?) Both, yes. (Which one first?) Often I write things down first. (Write it?) Yes. I often write down words or things that I've seen, so it's a mixture of both. You can't really define what's ...

21. Do you prefer gathering lots of possibilities or deep facts?

Generally start off with the basics and then I do branch out. So I generally have quite a big knowledge on the actual project itself, but for the end result, not all of that comes through. So that could be time wasted, but it means I have a deeper understanding of what I'm designing, what I'm doing. (So wide or deep information?) I'd say deep. Yes.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Unconventional. I think I generally go for older things, and then you bring in designs. I don't go for the latest, most, just the older.

23. Do you prefer to organise your work or to work free style?

I am trying to follow structure.... But cannot stuck to it.

24. What is your motivation for your project? People or tasks?

Self-motivation. Yes.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

The educators'. Yes. It should be myself, but it's I think the educators', because you're working towards what their feeling is. Because the project is never really for me. I mean, they should be, but it's not like I'm going to design something in my house. If it was something in my house, it's only what I think that matters. But when it's being judged and viewed by everyone else I sort of work towards seeing what they think, hope that they like it.

26. How do you perceive criticism? Tactful or direct?

Direct, yeh.

27. What is the social environment that encourages you to work in groups?

Competitive social environment with my friends.

28. What do you like more: starting or finishing tasks?

Finish it not start at all. That's the hardest point...Just force stuff into it.

29. What is more important to you: being creative or being organised?

Do I have to choose? It's more... efficiency is very important, yes. But the creativity and the visuals are important. So it's a bit of both. But I think I'd verge towards ... it has to work. The space has to work to be efficient, it has to function, it has to meet all the needs of the requirements. But it has to look good as well. So the creativity and playfulness is part of it and if it was just efficient you wouldn't need us, you could just... so, like architects make it efficient, so we made the environment, we make the atmosphere. That's the creative sides.

What do you mean by 'creativity'?

Adding in something that's not been done before or certain colours, certain looks. You're creating an experience that's not been yet seen. So that's the creative side – you're thinking of something that's unique.

30. Do you prefer working following a structure or being spontaneous?

Structured plan. Although sometimes it descends into something free, you need a structured plan to pull it back.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Depending what we're doing, if you're towards the end of the project, a quiet, serious environment. You don't need people distracting you. But at the start of the project it's good to be in a more open space like downstairs was. You can speak to people and build your studio relationships together and students and that means if you get a problem you can speak to them about it.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Definitely. If you have a deadline, you have something to work towards. If you have lots of time, you end up just leaving it. So it's important to have a time because you just have something to work towards and you get everything finished for then.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

So, red, white, green, black, yellow, blue.

Red, white, green, black, yellow, blue. Would you like to explain or add anything?

No, it's OK, I think. If I had to put an order, that's how I'd put it. It's not strictly how, but yes.

Thank you so much, I wish you all the best in your project.

Students' code: Li.G

Institution (2)

Date: 22 April 2014

A) Supplementary questions:

1. Why did you choose to study interior design?

At first I wanted to study architecture, but I started thinking about *why* I wanted to study architecture and I realised it's actually the interiors I'm more interested in. And when I visualise ... actually my godmother did a good exercise. She told me there's a restaurant and she only told me that, and she was explaining to me and I started speaking about the interior rather than the exterior and she said, 'That's what you have to do, that's the answer.' And that's how I decided. Also, doing interior design at home, wherever I could.

2. Why did you choose to study interior design in the UK (for international students)?

No. I'm from Estonia. It's below Finland. It's the Baltic States, Baltic countries. I applied at home as well. But I think the standards in here are so much better.

3. Why did you choose to study at (the name of the institution)?

I actually googled the best interior design schools in the UK and GSA website came up and I just liked the website and this was the only school I came to see as well. I really liked it here.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Before studying interior design? (Yes.) In relation to interior design? (Yes.) Well, I went to high school and that's like a proper school, art school, which you can do when you're a bit younger. You just get a diploma when you finish it. I was really good at painting and I really liked painting. I think maybe composition, in a way. But I really like getting my hands on

things, so painting, sculpture, it's really nice. Painting and sculpture really. Maybe the last year we had this project to do a big room and I started working on this chair and I actually made a small one-to-five model of it and I tried to see how it works and maybe the product design a tiny bit. I don't know if it answers your question?

6. How would you describe your experience studying interior design? Why?

So far my experience has been really good. I've met a lot of people. It's a whole new experience because I've moved abroad, so that's a whole experience and just getting to do new projects. Yes. I think when I was looking maybe straight like this, trying to narrow in my point of view and understanding of the whole world, not just interior design. Because you know you have to, when you look at new exhibitions or you're actually not at school you learn a lot about not just interior design, but you started to get design, even design history, overall art history. You get new points of interest as well. I've started to look more into graphic design, although I never did before I came here.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

I really like the studio environment, because we have our own desks and you've got your allocated space basically. So when I come in, my whole life is really difficult, for me to adjust with new surroundings. So if I move to a new place it takes me at least a year to get familiar with the space and feel really comfortable. So if I change the space or where I sit, it takes me at least 15 minutes to get to know the table and adjust. So I really like that we have our own spaces and places to be. I feel maybe safe, like home. It's a second home actually, because sometimes you spend eight hours at the same desk. 'Supportive'? It's really good because you've got your tutors around. You can always go and find them. If you can't find them, you email them. It's really nice and supportive because if you have your peers sitting next to you, it's nice to go and just speak to them, so interior design-wise. Also, if I've ever had any trouble with any other issues, for example council tax that I've been thinking about or how to do my CV. The School provides all the services. There's the Learning Support Service - when I struggled how to write my essays, I went to those so there's so many opportunities, but you just have to use them. So not in the studio even, but overall the School's support system I think is really good. And also how I got here was because I wrote to the Student Support Services and said, 'I really want to come to this School', and she wrote me back. So that was really helpful and encouraging. I really like the fact, which was really weird at the beginning, (because I'd gone to another art school, which wasn't like a university but it was like an education centre), that no one tells you that you're right or wrong. So in that way they encourage you to go your own path, if that makes sense. If you speak to

your tutor, they are not saying, 'Oh, this is really good', 'This is really bad'. They try to push you in the right direction, so it's really encouraging to go wild and go mental with your design ideas and not to limit yourself. And 'inspiring' is to see other people's work and to speak to them, I think. Yes, it's really good.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

This project I've been struggling with my design process, I would call it maybe that. At the beginning I started to think about what I would like to happen in the space. How I'd interact with the space, if I was in the space. I think a lot about how people use things and if I have this chair this high, will it be comfortable? If I had the kitchen there and there, would it work? Would it actually be realistic? If it was built, would it work? Would it be something you'll not enjoy using? So I started thinking about what I would like to happen in the small office. And then I move further on the plan, work on the plan and just start to think what would be there – furniture, what would the layout of the plan be, and maybe if I have some ideas, I'll speak to tutors. This project I spoke only once to the tutors, so it was a bit hard, but in the future... Also it was hard this project, because we had so many other projects at the same time, but then I realised that's what actually will be happening in the future. You will have so many projects at the same time, you have to be able to go from one place to another. So it was good. Time management? This is a good one. I just work as hard as I can in a way.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Sometimes it's really difficult to understand. For example, with this project we had, we weren't told what was in the space before, so what was in this space before we got it? So, if it was an actual space.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think how I work, maybe my design process still... Sometimes I start with the plan and start working with the plan, but maybe I should not do that. Maybe just like the last one, I just do the work, look at the plan and start looking at the things which would inspire me. I know it won't be on the tape, but in here I started looking at pictures and the materials before I even started doing the space. And I really liked the glass and maybe the surround; because we're in the new building we've got a lot of glass in here. I think maybe it has an effect on me. So I looked on the glass and I was thinking, 'Ooh, maybe a greenhouse?' And then from the greenhouse, I developed the box and I still don't know whether I should be doing the plan at

the same time, or which is the best and the quickest way to get to the idea of the space, of how does the space work. So I think one challenge is to ... maybe I keep discussing all the things with me, I keep going around and around with the idea I have, and how to say 'No' to myself, to my idea. As one of the tutors was saying before, if you have a good idea, or if you have mainly good ideas, my challenge is this idea is for the next time when I will choose this. Maybe that's my biggest challenge.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I think both, because in my country in the university, you get really stupid subjects. You get mathematics, you get physics, you get product design, you get history and then you have to do something in every subject. It's really strict and it's a lot of work and that's all I've seen and I know some of my friends who've gone there, they do a lot of stuff. So maybe I was expecting something like that. But now I see I have to study all by myself. I can choose what to do and what to not, which will interest me more, which I choose to develop myself in. So I think in a way, I was expecting this to happen. I knew there was not going to be a straight structure, so it's perfect to be a bit more open for me. But then again, I wasn't expecting this to be so open, because the first review we had, I went home and I was so disappointed because no one told me I was good or bad. All my life everyone's told me, 'This is right', 'This is wrong.' And it was so hard and it actually still is because all my life in high school, you would get a five or you would get a four, the grade. Our grading system was one to five, so if you got a five you were really good. And here you don't get that. It's really up to yourself, so I think in that way it was something I wasn't looking to.

12. How do you see yourself as an interior designer in the future?

I haven't thought about it so properly. I really want to do interior design. I don't know yet which area I want to be in. There's retail or commercial, or whatever. I don't know yet. I know it's a decision I have to make. I feel I want to be a really good one and I want to make interiors better than they are right now. Like the common sense of maybe a hospital. You know, you go to a hospital and you know it's a hospital; it's a horrible place to be because it's white. I want to change that if I could, even in one hospital. That's what I want to do as an interior designer. That's why I came here as well, because I want to – it sounds silly – but I want to make the world a better place.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

In a way, both. I really like teamwork, the discussions we have, I love them. And teamwork can be really good if the people you know work together, but if you get teamwork and people are not putting as much effort in as some others, it's just a waste of time sometimes, it's really hard. I like it to work when people are 100% together in this, it's good. In a way, teamwork is hard because you have to put your own ideas down and accept other ideas. I mean really be flexible. It's something you have to work on yourself with when you are doing teamwork. Someone else is having a good idea and everyone else agrees but you don't like it. You have to think, 'Well, let's see how it works.' I like to work on my own because then you can just do whatever you like. But I think in a way, teamwork is so much more fun and you move so much faster than you would if you are alone.

14. Where do you prefer to work on your project? Studio or home or another place?

I really like to be in the studio. I like to keep studio and home apart. Like here's the working and at home I'm doing whatever I like to do in my free time. It usually happens that I leave the studio and I'm still thinking about the project, so it's all interlinked. Sometimes if I don't feel 'at home' at home, if I have work lying on my table or something, I go to a café. Then I feel I'm not doing any work. I think it's also to do with what kind of objects I have in the studio. I can use the computer I usually don't use at home. So I do all the computer work at the studio. I usually like to do all my models at home because I feel I've got more space in there and it's a lot of stuff to take with you from home to get to the studio. Scissors, all the glues, all the pencils, at home I've got all of them, so I just like leaving it there. Maybe I feel in here, the space? I don't know why I do all my models at home. I've always done them at home. Some of the stuff I do at home and some of the stuff I do in the university.

Yes, I am learning. Oh my god, you're right. It's weird, I think it's challenging, even when I leave the studio I keep thinking about it – the design and the project. I keep going around and around in circles in my mind - how does it actually work? And I keep visualising in 3D in my mind, how would the space be if I turned it around as I was doing on the computer screen? So maybe one of the challenges is also just to say, 'No, stop working' and doing something else to get my mind off it. It can drive you mad.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Quiet stuff I do at home like drawing, when I really know what I need, I need to be quiet.

So this is the point when I've got so many good ideas and I've chosen one. I really like it and I feel really positive about it. The next step would be to start working on my plans, seeing what materials I'm going to use and how it will actually work with the people into it, with the

idea. People together with the idea, maybe. And start to see how the idea has to develop itself. Or change itself according to people. If I'm thinking about the box, it has no doors. I want a person to use it, I have to make a door for it. So I have to make it work actually.

16. Are you confident sharing your ideas with your peers?

I think I'm really shy in that area.

17. Do like presenting your project in front of others?

No, I know it's really bad, because I like ideas, but I feel maybe they're reflecting me in a way maybe I'm not. Such as if I have a silly idea or it's not good enough or ... I don't know. I'm really shy.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I like framing the conceptual idea, so that's when I'm basically brainstorming. Then I get all the ideas. And then I go around places and think, 'What if I do this, what if I do that?' I really like thinking of the possibilities and solutions verbally, so that's basically what I think the first thing is as well, getting to the main idea, and when I really like the idea, I get so enthusiastic. When I get the main idea, I start to love the project and then I feel it come to life. I really love that. I love when I get my grand idea. If I don't have my grand idea, I'm not happy. And then I like drawing sketches of my ideas. I get the idea out of my mind onto the paper, onto something and then it's becoming something. Yes, it's the next one – evaluate and choose the most suitable possibilities. Yes, that's the hard part. That one I don't like right now.

Preparing my final posters and models and PowerPoint show, I really enjoy it. It takes me a lot of time, but I feel like I've evolved so much compared even to four months ago, starting to do the graphic design of the whole layout and stuff. Yes, I think it's really important as well. And I actually do like to talk about my project, but it can be stressful. So that's the downside of it. Sorry, so many points.

19. Do you prefer thinking of the holistic picture or the details?

I have to think of the whole because I think it has to work together. It has to have a bigger balance to it. And I really like details as well. I think both. It's difficult. I think more, the whole. 60:40. 60% the whole and 40% the other. If you do it on the computer, you start to think about the details, but you start with the whole.

20. Do you prefer to solve problems and find solutions through words or practically?

I think maybe both because teamwork is all about speaking, but it's really good if you make stuff. I think when you're doing teamwork or you're explaining something to someone you're speaking a lot but then once you sketch something down, doing something physical, you can understand it so much better.

21. Do you prefer gathering lots of possibilities or deep facts?

I find my grand idea and I just go for it. I don't do a lot of initial research. I've tried to do it before. I still try to do it. If I get stuck, I think I do research.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Yes, I try to balance, but I don't like the normal, everyday thing. I try not to do it. I try to do something new, try to put my own stamp on it, try to make it original.

Yes, so it will still work. It can be really, really risky, like Alexander's. I really liked his idea, like the toilet in the middle of the room, but I didn't do it because I found it too risky. I don't know if I would like to be in that toilet. So even if I had the plan and I put it in myself, I would not enjoy going in that toilet.

23. Do you prefer to organise your work or to work free style?

I tried to with this project. I did. I read the brief and I made a list of the things which should be in the space. And then I took it down the list.

24. What is your motivation for your project? People or tasks?

I don't know. It's an idea that... I don't know how to say this, it's maybe the feeling you get out of it. It has to be the feeling. I feel like although I'm giving something, I'm getting so much

back myself, it's really positive the whole grand idea. There's a thing I read somewhere that if you are not that creative a person and you speak to other people, if you're not the best person in the world, or maybe if you're an average person, you speak about other people. If you're a more educated person you speak about actions, and if you're an educated person or a high-thinking person, you speak about ideas. So I feel like ideas are food to my brain.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I feel in a way, because I was brought up by saying, 'This is right', 'This is wrong', 'This is really good' or 'This is really bad', I still feel someone who has authority, it's really nice if they say it's good. I do feel like someone is patting my head and going, 'Oh, you've done well'. It's good, it makes me feel good. Or if someone likes my ideas, it's really nice. But I think the satisfaction I get out of it when I create something which was in my head, and I get it out there as I want it to be, I think that's the best fun. I was so happy last year once I got my final portfolio and put it all together, I was so proud of myself and that. I didn't even care what grade I got it. It's just like ... it doesn't matter. I was just happy for myself, so I didn't mind what the tutors were going to say, I was just happy that 'I did it!'

26. How do you perceive criticism? Tactful or direct?

No, I'm really, really open-minded. But sometimes even if I see that it's not a good idea, I usually don't tell them it's a bad idea, I just try to make them think...

27. What is the social environment that encourages you to work in groups?

I don't like the energetic side like when it's group work. It's something I don't have to focus on. I think it's something I've been taught first of all.

28. What do you like more: starting or finishing tasks?

I think to create something that will be realistic.

29. What is more important to you: being creative or being organised?

I think both. So it has to be – you know, standards – the disabled toilet has to serve its purpose. People need to use it. I also think it doesn't need to be a white box, it can be something really, really enjoyable. Really designed and nice. I don't know if that answers.

What is the idea of 'creativity' in your head?

It's making the balance between design and life.

30. Do you prefer working following a structure or being spontaneous?

I think I've been so far really free. But I do have the points in a way that start off with thinking a lot about what I want the space to be and then putting down points in the process-wise. Now I want to be there, now I want the plan to be ready, I want to work from this point forwards. But sometimes you can't have the idea at the certain time when you want it, so you have to give yourself time, for example, sometimes you're just tired, it's too much. I think more the 'open and relaxed'. (The idea will come?) Yes, hopefully it will come.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I do listen to a lot of music because sometimes I think there's noise pollution. It tires me so much, because I keep listening to new sounds, and there's something up, someone's speaking, I get so tired by it. So I do find being in the quiet so much easier, like sometimes I'm here in the evening just because I enjoy it more. I think it's a personal thing. I really like working quietly. I don't like the energetic side like when it's group work. It's something I don't have to focus on. I think it's something I've been taught first of all. I used to have a drawing teacher who always told us not to listen to music while you were drawing because your mind or some part of your brain is trying to work and listen to the music and it's not 100% focused on the work you should be doing. I think it's scientifically proven that your brain is made to find new sounds all the time, so if I hear something new, my brain is constantly, 'What was that?' But it's hardly conscious and I can't do anything about it. So if it's silent, I can focus 100% on the work and there's not 5% of my brain working to try new sounds. I think that is true. I like working in silence. I do work a lot with music on. When I just do stuff, you know, when you're already working, you've got your ideas, so I'm going to give my final accent. So when I'm thinking about ideas and coming up with ideas, I like the quiet. But while I'm working on the mood boards or the final layout plans, I like listening to music because I don't need to think hard.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

It's really stressful. It's *really* stressful. I do get stressed. (But you work?) But I work so much harder. Like sometimes I was so surprised. Last Tuesday I knew I had to finish the project. I just had to do it, because I didn't have any time on Wednesday. And I came in and I did all the work and I was so surprised. I put on a deadline. I had ten hours to do this and I did it. So it made me focus and do it. But if I have a lot of time, I just think, 'Ooh, I can go and have a snack. I don't have to do it right now, I can go home early.' But then it's, 'This is it. Everything else can wait.' You're focused on this and you put 100% in it. I think it's good. But it's bad at the same time.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

That's the first. I tend to use creative ideas. So I saw the information available and viewed it. Alternatives in creative ideas. Managing the thinking process. I think that would be in the beginning and the end, because at the end usually you have to use a lot of 'I've got to go for this. Yes, I'm going to use it because I think it might work'. And it works and you're trusting your intuition.

How do you use it at the beginning?

It's also at the beginning because even then you use your intuition in a way, what you're going to go for, the path you're going to choose. I'm going for that. They're both 50:50.

I think it's intuition that you're saying. It's going through the whole project?

Yes. It doesn't come at the end. It starts at the beginning, yes.

First colour white; then red and the red will last till the end; then green, then yellow, then blue, then black. Would you like to say anything more about why you put these colours in that order?

I think it's the way the whole process goes through it. I think the managing the thinking process also continues and is happening. But I think in the end you need it a lot, because usually with my sheets or the ideas, as Tony was saying today, you might have three different pictures which you really like, but you just have to pick one. I think that's right there at the beginning as well.

Feel free to change anything.

I think those might work. 'Creative ideas'. Yes, I think it's like this. Now it looks so much better, I think.

White, red, green, blue, yellow, black. Excellent. Thank you so much for the interview, Li.G. I wish you all the best!

Students code: Vi.G

Institution (2)

Date: 6 March 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

Initially I was very creative when I was young.

I liked doing things with my hands – painting, making models, so I decided I'm just getting better at this, I might as well consider it to be my passion in life and my talent and be creative because people seemed to be intrigued by what came out as a result, and paintings.

And interior design came along later when I decided, because I had a confusion whether I wanted to study that or fashion or architecture, and I decided interior design's a good mid-point between the textures, the math, architecture and all that engineering details.

So interior design was ... and my mum suggested it as well, she has an interest so it's like I'm participating to my family's hardworking ideas of making a life, in general being a good person, because otherwise I guess, fashion would have been kind of that world of vain, very peacock feather expression and architecture's a very strong, serious profession, so I guess interior design is a calmer profession definitely I think. It's safe being in front of a screen looking at materials; it's very calm for me.

2. Why did you choose to study interior design in the UK (for international students)?

Because I was raised with very English culture and TV, very artsy. I also studied in the Netherlands and also at an international school when I was in first grade in pre-school, so English is very close to me, I guess. I actually learned to write in it first so it was only natural. And in my country there is a different outlook for interior designers – they are either separate individuals, there's not many companies that actually form and do well.

3. Why did you choose to study at (the name of the institution)?

When I applied, I applied through my school, through UCAS, and my teacher coordinator said, 'Choose, I'm giving you options,' because I wasn't familiar with the types of ... there was interior design, interior architecture, and I was not sure whether I wanted architecture or fashion. She just suggested schools and I looked at the Guardian website and the classification and this seemed like the most reasonable. I had four other schools and for some reason or another I chose this one and my heart set on the one I liked the most for

various reasons. Should I specify that not necessarily why in comparison with other schools, should I say? (Yes.) Well, for example, I applied to the London School of Art and the London College of Communication and I was accepted there but it was a matter of price, for example, and then I applied to Brighton I think and other schools that had interior architecture instead of interior design. It was those kinds of details that made the difference.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I like being creative and participating in the world, like giving a positive impact like every profession. If you're a doctor, you're not that creative, you follow strict rules of safety, but in interior you can get loose, I guess, in that way and experiment.

What do you mean by 'creative'?

'Creative'? I guess just being expressive and seeing people's reaction to my art and making the environment I'm in more colourful and friendly because I feel it's ... I really enjoy making things inspiring to other people - their gloomy day, making it brighter, that kind of positive energy. An interior what can you do? It's not supposed to be in the way, it's supposed to be guiding you throughout your day without being in it, like not annoying, so that's, I guess, what interior design is, it's just there to be useful. And if it's a commercial space, it would be more about remembering that brand or that image, and wanting to go back with your friends, having a positive nostalgia towards it and all that interesting stuff.

6. How would you describe your experience studying interior design? Why?

I definitely wasn't prepared the first year for all the programs that I came across and have been using since and the amount of pressure literally that has been placed on every one of us. I've noticed from experience that it's a change from not knowing at all how to use most of the programs but ...

There was a lot of pressure in terms of proving yourself. We're exposed to technology every day but we use it in a basic way, and using it professionally like this is motivating but at the same time it's very difficult to get, it's challenging. In Vectorworks, for example, learning all the details to make up a visual image that actually looks real, it's getting to that point through the rendering and the time you spend choosing the right furniture. At first, it was a long process and everyone thought this is so long to render, just a basic ...

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, it's definitely helpful because you see that when you're trying to be creative and are expressing yourself, it's always best to have other people's opinions, so you know you're making this for others, you're not just making something pretty. It's helpful also that it concentrates your mind on the interior and not just making it look the way you want it. You're focusing on the client and just the people that are around you inspire you to make it not for yourself and 'I like this colour'. So you ask for their opinion, you get a more objective view. Especially the first year our project was one of our collaborative projects between the departments with architecture and product design and was called 'Loss' and we had to make a collaboration and that was very interesting to see what other people think, because I think creative people are expressive, but they're self-absorbed in a very positive way. They're so self-absorbed about trying to reach out and be creative without noticing how that affects other people. And it's very useful to notice how it affects other people because it can have a very positive and useful impact in their lives. So being creative and helpful is a good combination here in the studio.

'Supportive'? I wouldn't say 'supportive' in terms that it's from high school, because I'm straight out of high school it's a very big change. In high school, we're just, I think the phrase is we're 'spoon-fed information' and we're supposed to remember it, and now it's trying to be creative. I think it's a very different approach to viewing an interior and everything in it; it's re-arranging your point of view of life.

The studio? Last year we were in Skypark which wasn't meant to be an art studio. I guess it was office space so I felt comforted by the people I knew there around me. The same people, just in a different building last year and now I'm still getting adapted to this space. And it's loud as you can notice with the builders. So that's a challenge, but I know I have to be here. Yes, it's an interesting situation. I need to adapt to a busy environment.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I try to read the brief and stick to it. That's the most important thing I see because no matter what you do, in terms of the final result it will always be different. Because creativity and colour is always in my eyes what I see as appealing or not appealing, it's very different from everyone else's view so it's interesting to see the combination of the rules from the brief and my creativity. That's what I think is always supposed to be the final result.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

They are not always clear to be honest, because I think, for example, at the beginning of this year the people who write the briefs changed in terms of our tutors changed, and their style of writing can be noticeably different. I have a difficult time relating to what it means, possibly because this is not my first language, but, as well, I can notice the difference. And I think that's intentional; it's a challenge that should be met with. Different people's points of view – very interesting to adapt to that.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

The main issues are organising my layout and page; when I have the typography and the images, making it presentable, simple and clear. At this point, my work looks like a mood board. (Mood?) A mood board. A lot of information and imagery - just not at the stage at which you would present it to a client. They wouldn't necessarily understand your point of view.

I really like the way we work. We had our hospice project which, instead of three weeks it was three days, and the collaboration we achieved I think was very useful. First of all, because you see how other people are at this stage in their development. You can compare, if you like, how you're doing and then in three days ... (You can learn from them, you mean?) Exactly, you can learn from if they like your approach, if you like their use of words and all that. Also, you do it in a group in three days, then split up and do it your own way. It's very interesting to see how one person can take from a group project and make it even more interesting and creative. So the hospice turned out, I think, very realistic too. I think the clients liked one element of it; it was a window bench/settee. But yes it's important that you can do it even in a group and you're not by yourself in there. If you're alone, you can think about it even more and it's best that way to have collaboration and alone time. It's interesting to work in a group.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

No, I had an idealistic, creative expectation of being free to express beautiful designs without them being in context and I think that's what happened from what I saw. Everyone was surprised that from the first project we had to make an interior. We didn't have to draw anything. You were introduced to the programs and that was a very clear approach, very functional I think now, and I'm thankful that I can use the program and import furniture in it and have it more realistic rather than drawing everything by hand.

12. How do you see yourself as an interior designer in the future?

As I mentioned earlier, I hope to know that I'm interested in design that's, I forget the word, exhibition design. I guess I'm trying to be noticed by that creatively, just expressing interior elements in a beautiful way, but I don't think that's functional. My ideal interior designer hasn't formed fully yet.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I like it but the three-day experience we had, only once with the group of people I had it was very pleasant and very useful, because we agreed. I don't know if, with different people, we might have not reached that same conclusion.

14. Where do you prefer to work on your project? Studio or home or another place?

I really like working in the studio because I don't get distracted by anything if it's just the screen and me. Otherwise, I could decide to get up and go and talk to some of my flatmates or just do something else. Here you know it's calmer that way. You know what you're doing; you have a goal of making your project. (That's better?) Yes. A work environment, I guess.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

For example, this is not connected to my current project, but yesterday I saw an interview online that the number of people who spend their workday on a desk is increasing. And sitting on a desk for a long amount of time and being inactive is apparently bad for you. So I started searching online for treadmills that are in the floor, you can step on them, and desks that are movable and flexible so you can be standing and working on the desk. And that was really interesting because I think that's a very big part of making people's work more effective and not damaging to their health. And also I think a safer work environment is very important to the future in general because it's not considered as much how much time you spend using technology sitting and not exercising at all. I don't exercise, so I know it's not healthy. This project I would be interested in. It's not connected to the small office project I have, but it is actually, they spend their time sitting so I guess if their budget was bigger I would suggest having desks that are liftable, so you could be standing and moving around a bit, not just ... (You can't add this part?) I think I can. I don't know if they would like that. If they are very calm people, they like just sitting down. If they have a busy life with their families and exercise outside of their work, I don't think it would be necessary.

16. Are you confident sharing your ideas with your peers?

I wouldn't say I'm confident, I'd say I'm comfortable, but I'm a bit paranoid of teachers. In high school I think my teachers were intentionally strict. Their approach was different and the country is different depending on the country and the teachers.

17. Do like presenting your project in front of others?

I'd say I just have a built-up paranoia of what people think of the projects I produce, so that's a boundary. Self-image to me, not how other people see me, just being more comfortable in my own skin, I think that's the problem in terms of presenting and expressing exactly what I want them to know from my project in a more objective way.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

At this point, 'B – identifying the project's task, boundaries and problems' is always present because if a client has decided to make changes to their interior they definitely have that kind of boundary.

Whether it's task boundaries or problems? For me, most interesting is 'thinking of possibilities and solutions verbally'. Generate ideas and brainstorming. That's what I'm having a problem with since I'm still learning about new designers and their furniture and patterns and familiarising with the styles from historic eras.

19. Do you prefer thinking of the holistic picture or the details?

When I make the layout and the distribution of the functional areas – in terms of where is the bathroom, where is the kitchen – I have a holistic approach in terms of where does this

person pass, where do they go. But, what was the second? (Start taking the details in the project.) I focus on the details when I present the project so the page layout is when I go through details. So it's late but I have to work on that – presenting.

20. Do you prefer to solve problems and find solutions through words or practically?

In terms of experience, this summer I had an internship and it was interesting because I went to a client of this designer I was with in my country, so it was interesting to see the conversation between designer and client. It's a very specific example obviously. It's just one and you can't judge by one example, but I think experience is something I definitely value more than doing my projects over and over on the program and sketching and being isolated. Collaborating is more interesting.

I use Photoshop to make a mood board and present it to others and they basically pinpoint the ideas they like and I think, 'I agree with you. I am going to use this idea and remove the other ideas. I'm going to focus on this.' So it's a collaborative process in that way.

21. Do you prefer gathering lots of possibilities or deep facts?

I wouldn't say I choose a specific piece of furniture because at this point I'm not familiar with what the client would have liked in that furniture or whether it would have agreed with them. A large amount gives meaning to the project, so I wouldn't go from one specific detail. Ideally, if I had the time and energy I would make one solution and then another solution to the project and present both ideas and maybe extra furniture if they liked it because that gives a wider option and range. I don't think focusing on one piece like a chair, I'm thinking the whole office. And the shape of that chair it would be constricting.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

New, risky. Exploring your comfort zone is what I'm doing at the moment. (New, risky?) Yes, new and creative.

23. Do you prefer to organise your work or to work free style?

Organised, not free of timing because that way you lose focus and concentration.

24. What is your motivation for your project? People or tasks?

There is an external motivation because I don't feel the need to be motivated to make projects oblivious of the people that are in them. It's for the people that are in them, so their opinion. If they give me an image, an object, like a piece of furniture, that would mean something towards the future interior so I would depend on something external definitely.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

Personally, I like looking back at projects and seeing that up-to-date I have progressed and when that is appreciated by my tutors I know that they as well feel they have done their job, so it's a mutual respect thing, I guess. (So both?) Yes, definitely. The teacher is there and they want to tell you the experience of teaching they have and test new approaches on you and at the same time you're there to appreciate what they have to bring to you. There's no space for you wasting their time. It's that kind of mutual respect.

26. How do you perceive criticism? Tactful or direct?

Tactful definitely.

27. What is the social environment that encourages you to work in groups?

Everyone said their opinion, we wrote everything down. It was clear. We didn't have one person telling everyone what to do, like I've had experiences. But it was a more realistically fair approach in second year than before. We agree with each other more now, I think.

28. What do you like more: starting or finishing tasks?

Finish

29. What is more important to you: being creative or being organised?

Creativity, I think, depends on the location of a project. If the project is supposed to be big and gather attention, for example, if it's a commercial project...

The location of the project?

Yes, in which I mean if you are designing a big retail store and it has to be attention-gathering, you should definitely focus on being creative, even controversial, to get attention and customers for example. But efficiency standard – if it's a low-budget project for example, you would definitely focus on flexible ideas that are useful and safe and not that luxurious or visually appealing. So, it depends.

30. Do you prefer working following a structure or being spontaneous?

Structured, definitely, not free of timing because that way you lose focus and concentration. If you're free you just get so many new ideas and change them. It's good to focus on a specific plan and a specific person so you know this is what's happening with the project and it's getting done, otherwise it's 'Look! They made the new furniture, it's much more useful. We should change our idea'. That's endless.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I don't think I have formed a serious perception of design because I'm still not trying to specify in whether it's commercial design for example or home design, so it's not serious in that term. But I'm 20, so I like having fun with creative designs, that's what is driving me to like what I do.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

The deadline? I think it's a very honest approach that you're supposed to motivate yourself to do better and create a more interesting project and show your inspiration, so deadlines... (It's stimulating to you?) Yes, exactly. If I don't have a deadline, I would think, 'Do these people want the project made or no?' It's oblivious to the practical.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

So. Information available and needed. Being given a brief or talking to the client. Intuition, feeling and hunches – what the client might like, but isn't saying at the moment, for example in taste. Managing the thinking process. Getting familiarised with what the client can afford or likes in terms of style. And then cautions and difficulties – where things might go wrong. I guess considering the endpoint – how the space can be dangerous in terms of (safety?)

Yes. And then, alternative and creative ideas – what can be branded in that space. What can appeal to more people coming in if that's what they want, if it's a commercial and not common space like a library. Depending on the function. And then values and benefits. Why something might work – that's never sure. We have to wait and see who likes your design. Who goes, in fact. So that's it, I guess.

White, red, blue, black, green, yellow? This is the order?

Thank you very much for your time. Good luck!

Students' code: Ma.G

Institution (2)

Date.....

A) Supplementary questions:

1. Why did you choose to study interior design?

I was always artsy and did art schools and I wanted to do and stay in the creative industry that would bring you a better future than fine art, so I just decided that. It will be a good mix and also I always look at interiors when I go to anywhere and it will be a good fit.

2. Why did you choose to study interior design in the UK (for international students)?

I am a Romanian and

I went to a British high school not a Romanian school so I brought up with the idea to study abroad and it also a logical option as I have the language, I know the system and I know how people work, so it is a logical continuation of study wise if that make sense.

3. Why did you choose to study at (the name of the institution)?

My first right teacher went here I think fine art, I am not sure. And I wanted always to look for a school that looks nice and this is the one I went for it.

4. Which year are you in?

Second Year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I don't know I just kind think that if I am thinking critical as I criticise a lot of things quite often and when I go like to an interior and they are not really match their use, as if you work it yourself you will think it does make sense and it works properly.

6. How would you describe your experience studying interior design? Why?

I quite like it because there is a lot of people and it kept these ideas for everyone. But in the same time I just prefer to work on my own and go away from all the people in the studio and this what I have to do and this is how I will do it.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

it helpful at time and helpful in the beginning of the project when you start getting your ideas and talk to people about it but by the end I know what I am doing it is just find it frustrating to be in here so many people doing so many things and I start like should I do that should I will be doing this or should be doing something else..... Too much information coming in and hitting your head and sometimes you want to do it specific way!

Yes I think so, especially in the beginning of the project all energy in this place to see everyone work on together and sort of different to think that work better.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I usually what I just do is started off and brain stormed and try to think of ideas and drawing them down, and then I start think of the layout of the plan and so ever until ... the project usually takes four weeks and until the last week I start get the visuals done, because I don't like to start the visuals until I have rally clear ideas in my head. I don't like playing on with the visuals like doing them and changing things and make amendments, that's frustrate me! So I need a clear image in my head and then go build it and make it. But in the beginning it is thinking and thinking and thinking and then searching and writing down and maybe sketching.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

No pretty straight forward usually!

It is fine, but sometimes to get the proper concept, as I wanted the concept to look prettier! I think you do not need a big concept for every part in the interior one great concept for one part then abstract ideas for the rest of the area to be not too much ideas in one area.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Sometimes I have like intellectual thinking and I realised that I did not put anything in visuals plans, and I put my time management is sort of off, but I am working on that. So I am trying to build stuff earlier and I am a little annoyed and hard for my thinking as when I build something up and visualise. It is really hard for me to visualise it in different way or modify it.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I did not know how it going to be like! Because architecture and design schools in my country is so much different and got more CAD courses and structure and materials and the studio work, and I does not know what it going to be like. It is more interesting and you do not imposed in set of values, you can work and discover your own way of (working) ricking, so no one will tell you this what you have to do and this is how to do it. Here we got proper courses with the studio but not theories.

12. How do you see yourself as an interior designer in the future?

I don't know, I think I will go to my country and work for a couple of years then do my master degree. I am ready working right now in an architect framework in my country in every holiday I go there. That's interesting actually I love it, and it is different from working in the studio because you are interacting with people and now it is different in the studio as last semester we worked in two projects and this semester we got appropriate project and that much better because it is an appropriate work not just a waste of time. As working with real clients are interesting and stimulating, and talking to suppliers is really nice and seeing something built is better than doing something theoretical and it is satisfying.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

It depends, I like working on my project but I like talking to people about it. So I think I really enjoying working on groups two or three maybe and choosing the group, because you know who people you work with them better, otherwise it's head butting no matter how good the other person. Head butting just because you do not like him or her, so it does not work.

14. Where do you prefer to work on your project? Studio or home or another place?

I usually do it at home mostly, but then I come to here toward the end to do Photoshop and get all parts together. I like the reviews also as you can see others work and hang on some points and then go home as it is quite to apply them and focus on one thing.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Just talk to people, because all my friends are in architecture schools or designers and we need to practice any way. It is just like "what do you think of this?" And then we can brainstorm together. Because I found it easier to talk to people who are fresh in the project

so they are not bogged of little things in the brief, and if you asked someone who does not have any link to it they can give you much objective opinions, like; you can do that, ooh I did not think of that....!

16. Are you confident sharing your ideas with your peers?

Yes, but some students' do not share their ideas at all.

17. Do like presenting your project in front of others?

It is really fine for me, I do not mind I just kind of aaaaaa because of some people so close and don't share their ideas so why I should do with them! But I do not mind it at all.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Thinking of possibilities and solutions verbally (generating ideas/ brain storming). Drawing sketches of your ideas. Evaluate and choose the most suitable idea, and justify it logically.

I would choose these three tide together as before I start CAD, because for me I think it is really important to get all the sketches and all the drawings before I start the CAD. So I do all the thinking and drawing by hand then start to put them in CAD, because I am more much comfortable about working with my hands the computer actually scares me.

19. Do you prefer thinking of the holistic picture or the details?

I start with that holistic place I think and then towards the end when I know how it going to look at stuff I will look at these tiny details and when it combined how it looks together.

20. Do you prefer to solve problems and find solutions through words or practically?

It depends what kind of things it is because if like now I have this problem and I prefer to make a model and do like a visual things 3D, may be with less complex plan I just make different things and I can tray another lay and turn to ciaos and then try another one and draw another draw. And it depends on the problem if it's with 3D kind of problem or flat issue. So if it is a visual issue I would try a 3D

I just take them all and see how they logically and practically they will be with the brief. And how they practically would be in the space, and if that's does not make sense and should not be there is left the idea like that. Practicality is the key element.

21. Do you prefer gathering lots of possibilities or deep facts?

I just like to take the brief and look into similar things have been done. Then, just take and take and take and add more stuff to it, so it is wider as not deep always until I find my idea. So, for the whole space is wide as I don't want to be bugged down as I want to put in my stuff as well... mmm ah this looks nice maybe I can expand on it.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

It depends on the project, if the project is simple like the library projects I put some shelves and I don't really care. But if the projectclose up places

Again it depends on the project, but I like new wacky things and try it out, but that can be sort of....if you put new technologies and it does not work it is not worthy, but if it's work that would be amazing.

23. Do you prefer to organise your work or to work free style?

Free style definitely

24. What is your motivation for your project? People or tasks?

There is always a project that I hate and I can't do and don't like at all, but sometimes there is always something I really like a space with more rooms and I have an idea for it or focus on the most exciting space and looks woow

I am self-motivated, interact with tutors and asking them, but I have these pictures inside my head.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

My own satisfaction, I have to make sure that I have put enough hard work into something, even if they like it or not I feel happy to work it out. But also working with tutors is important for me because it is like working with client, you would not do a project for a client with your own taste. You have to work with compromise, but now it is my own satisfaction and how much you go in depth in your project and how you learn from it.

26. How do you perceive criticism? Tactful or direct?

Straightforward

27. What is the social environment that encourages you to work in groups?

team work is about who is in this team. Yes, because it is frustrating some times because I have strong personality as well and I have got butt with others who have strong personality, team work is giving and listening to other perspectives and that does not always happening here.

28. What do you like more: starting or finishing tasks?

Start and think and think

29. What is more important to you: being creative or being logical?

Both, as I said I design places to be more creatively designed, but then cut them down to what more efficient. So creative and efficient, I would never put something beautiful in the space then tumble around it. So be properly creative it needs to be efficient,

What is creativity means to you?

Creativity is something different and new,

30. Do you prefer working following a structure or being spontaneous?

I always tried to work for plan but it never works out never! I never stuck to schedule, it is good to know the schedule but I never stuck to it...in the end I panic and I work harder but....

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Exciting and very interactive

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Definitely, I could never work before deadline. In a project I have the deadline on March and by end of February I have nothing ready. Then I worked really hard and finished 10 A1 sheets with a really good standard in less than one month..! so of course deadline stimulate me.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

White – Blue – Black – Yellow – Green – Red

White Brief Information

Blue Schedule thinking sketching

Black Restriction in the brief

Yellow Look into ideas and looking at different things

Green Working on problems

Red I feel what is really right

In the office project was the space division which comes up last nights when I googled randomly.

Students' code: Ro.G

Institution (2)

Date: 6 March 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

Well, I've always loved design and when I was younger I wanted to be an artist, but my brother said, 'Oh, you can't make any money doing art', so it's a good alternative, I suppose. I searched for degrees in the high school, especially the beginning, of things I could do like art-, design-related and when I came across a description of an interior design course, I thought, 'Oh that is something I would really enjoy doing, so that really stuck with me. And then I got in here and I really liked it, so that's really why.

2. Why did you choose to study interior design in the UK (for international students)?

Well, I was born in the UK, I was born in Scotland and I have family here, so I always knew I wanted to return to Scotland for schooling.

3. Why did you choose to study at (the name of the institution)?

G. School of Art, my mum actually went to G. School of Art as a town planner and I know that it has a very good course for interior design and it's really well-known for its interior design course so that's why I specifically chose to apply.

So your mum graduated from here?

Yes, she did. Which is funny because she's not arty at all and she did urban planning, so it's really weird when I go here and it's a very arty vibe and then I think, 'Oh my god, my mum went here.'

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Well, I think a lot of interior design while it all looks nice and there's a big drive, like you know, with things looking as though they're not exactly functional and that really gets to me, because I really like things to be both beautiful and functional. Because when I see these famous faces, I think how does that work and is it like really, I look online and there's really

nice things, supposedly like home interiors and I think, 'Oh my god, that doesn't look very homely, it looks more like an exhibition. I can't imagine anyone living there.' So I suppose that's my drive when I come to each project, I try to do things well, look quite cool and things, but are still very practical and could work in everyday life.

6. How would you describe your experience studying interior design? Why?

I think it's been really good and it's good how much you feel you learn. But it's not necessarily spoon-fed to you. You learn a lot just through peer reviews and things, you learn a lot just sitting there at reviews and hearing comments about other people's work as well as your own. And it's really nice and we're not just sitting in lecture rooms and being taught the theory of design. We're actually learning all this stuff basically just through different projects on our own. I think that's really helpful. Working in a studio, it's really nice, especially, because we didn't work in Skypark and there was everyone in interior design on one level, but here we have interior design but then there's the mezzanine which I like to work on because it's a bit more quiet. The studio experience is nice because there are interior design people so you can walk around and have a chat but there are quiet spaces you can go to and work.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

I think it's really helpful that there's people studying what you're studying in the vicinity, so you can just have a walk round and have a look and see what they're working on and have a chat, so it's really nice at how informal it is. And then seeing everyone else working, it is a good environment. Because I don't work at home, like the Vectorworks program, even though you have the option to store it on your home computer, I chose not to do that, so when I come into the studio I feel that I get a whole day's work done, and then I go home and I don't have to do any work. So I'm in the studio quite a bit compared to other people who might come into the studio for a bit and then work at home. I think it's really helpful to turn off that switch, you go into work and then you come home and don't have to work as often. So the studio space is really nice for that.

I suppose in this context, in this specific studio space, I like the big windows and that's another reason I work in the mezzanine space because downstairs you can see the windows but you can also see the sky. But here my view, if I'm bored or something's rendering, I can just look out at G. and things. Right now, it's not a very nice day, but when it is nice, it is quite inspiring. But the studio itself, I don't know, because it's a blank canvas, so I don't find it too inspiring, I suppose. It's nice and all, but I don't get inspired when I walk in this space, it's more like I'm entering into the work zone. I suppose that's a different kind of ... yes.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Well, the thing is, I try to do as much as I can as early as I can, because last year I would tend to spend the first week just kind of theorising and looking online for different inspirations. And I found near the end of the project I was rushing to get things to a finished-looking state. Whereas now I go right on Vectorworks, I do what I call sketching on Vectorworks. It's all good and fun when you sketch a piece of furniture, or you sketch a layout in your own notebook, but those aren't actually done to real measurements, so you won't know if it's going to fit in this space until you actually have that in Vectorworks and you're working with real measurements. So I find that really helpful, especially when we're given a plan with a project, because sometimes we have to do a plan for an area ourselves, so that doesn't get done right away, so I can't work, you know, in that sense I can find inspiration but I'm not ready to go on Vectorworks and build it, but I can't really until the plan's there. So this project is particularly good because we've been given the plan right away, so you can build it and start arranging the space. The layout took me a while so getting in there and having those three days just to find the perfect layout for my project worked for me at least. It was really good. So again, just trying to get as much done, for especially the first reviews, because I find if I have a project that would be acceptable for an interim review or a later review, but I have it for the initial review, then I'm going to get feedback that I would have got later, but I'm getting it now. So I can bring it up to a level that for the interim review is going to be even better, so I'll get better feedback from that. And then, I can take it up for the end of the year, because you get to go back and re-do projects, so it's just getting feedback I won't have done if I'd waited. You know, later on. So I guess that's what I try to do, just get as much done as soon as possible so I can get feedback and work on it, then good.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Well, depending on the brief, but usually they are quite clear, because they have specific sections like aims, what you're expected to accomplish, or what you're expected to think about in the space. Again, this is more the basis of functionality and the temporary aspect and that's clearly described. And then it also mentions all the things that you're expected to have in the space such as the kitchenette, the meeting space, the desk space for the two designers. So I think yes, for the G. School of Art, the briefs are really quite clear and if there are any issues that come up, we do have the pick-up review, which is just two or three days after we get a brief, so if any questions arise from the brief, that is the time to ask. Even if

there is a bit of uncertainty, there is always chance to ask, so they are usually quite clear. (So most probably it's clear, but sometimes you have some questions?) Yes.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think just coming up with the solution to the space that works. Again, especially with this project, it's a small space, so people are coming out with different layouts and things on how the space could be arranged and some of them might not be as functional because they haven't really measured like how big is the chair, like is there enough room for a person to walk around and such. So I think it's just again getting as much done for the first review, so if you have any questions, you're like, 'Here's rendered images, here is a layout, I've done a lot of work. Maybe it doesn't work right now, maybe you can help me, so that's why I ... like again, some people for initial reviews, they don't really have rendered images; they just maybe have ideas. So I think getting as much done even if it's imperfect, then you can say this is what I've come out with. And when they have rendered images, they can actually point to the problem hopefully and say this is specifically not working. Or this specifically is working. Maybe you should do more of that.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

No, not at all. When I walked in the first day I was so afraid they were going to ask me to design something because I'd never done that before. I thought, 'Are they going to tell me to do this thing they know I've never done before in my life?' And I thought, 'Oh, no.' They're fine, they are there to teach you. But the thing they did the first day was give us a really easy design, so working with new software you've never used before, it's like 'Oh my god'. So again, it wasn't what I expected, but looking back it was just the best way, because again you're not supposed to be spoon-fed ideas and theories, you're supposed to come up with them on your own. And the first year you were just finding that out, working with the software and mastering it and such, so even though it wasn't what I expected in its casualness I suppose, it's really helped and I think it's really successful and obviously the amount of students they get, they know it's successful the way they use it.

12. How do you see yourself as an interior designer in the future?

I don't know. That's a difficult question. (Have you talked about it?) I don't know. I really want to get a job first of all. I've been worried about that so much, rather than me in a job and what I would be doing. I don't know. I suppose I would want to do commercial things and again working with the functionality aspect and just making sure all my designs are practical,

I suppose. I don't know if that really answers the question, 'How you see yourself?', I want to design spaces that real people could use and real people could be in, rather than a piece of art that you go there to admire, but then it doesn't really have much use after that. That's what I want to do, I suppose, make spaces for real people.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I prefer to work on my project solely, but we did have a group project recently and that worked out rather well. That was, to be fair, a three-day project. (The recent one you mean?) Yes. And we had asked if we would do a group project that lasted a few weeks and they said no. I think they would understand the problems that would arise. Just because it's helpful getting feedback from big groups, but when you're working together all having really good creative ideas, it's which to pick and things. It's difficult, so I prefer working the solution out on my own. With outside help, but me solely making the decisions.

What is the most annoying thing in a team project or working solely?

Working solely, when you're working alone and you don't have access to tutors, if they're busy and things, and then you have a question. You know it's nice if you ask peers, but they don't necessarily know the right answer. Tutors don't necessarily know the right answer, but you would rather listen to a tutor than a peer, I suppose. So that's one of the frustrating things, and with a group it's more helpful, so you are in a group and you can bounce ideas off each other. If you are working alone it's all good and well, you can ask someone for their advice, but you can't just go up to every single one person, 'Can you have a look at this, I'm confused?' So at least in a group you can problem-solve together, but when you're alone you have to fend for yourself unless you can get a tutor, tutorial, but that doesn't always happen.

14. Where do you prefer to work on your project? Studio or home or another place?

Well, I think I might have been into that before, but I'll just say I prefer working in the studio for Vectorworks. My proposals that I do, I tend to work at home. But the actual Vectorworks, studio-based, I work in the studio, and that's just because again I like that feeling of when you go home you don't have to do any extra work, you can just stay in the studio.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Well, if I have an idea like the fold-up table idea, I might ... OK. I want a visual image of something that kind of exists like that, so I'll go online and I'll find an image. And I'll find something that exactly matches what I like or it has the same idea. And when I find that, I

start building up on Vectorworks, so I'll see how it would actually work in the space using 3D tools to again make it and manipulate it. Then I suppose once I've found it and I've created it and I've made it successful and integrated it within the space, I think that's just how I do it and then I move on to the next inspiring thing that I came across. But that's how I do it. If I get inspired I try and ... if I come up with an idea or I become inspired by just looking online and finding the image right away, then that's how I do it.

16. Are you confident sharing your ideas with your peers?

Whenever we do a peer review or let's say, if it's just you standing and presenting in front of everyone and maybe tutors, then I'm confident in my proposal, but then I just get nervous when I start speaking and I forget things I was supposed to say. So, again, I am confident usually in my proposal and I am confident asking, 'OK. This is the solution I've come up with, it might not be the right solution. Can you guys give me advice?'

17. Do like presenting your project in front of others?

I say that now I really don't mind presenting in front of my peers because everyone is really nice, but I prefer it in smaller groups, because when it's everyone, I just get nervous in front of groups of people, even though they're all really nice and I know them really well.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Well, I really like problem-solving. That's another aspect of interior design that I really like. I just like to problem-solve. One of the projects last year that a lot of people didn't like, but I

did like, was the route project. (What is it?) A route, like a path or something. We had to create one path using solely landings and stairs because we had one entrance, and then we had another entrance at the other corner of the room but that was two metres up, so we had to do it based on building regulations of one route solely of stairs and landings that get up to that entrance. And then we had to use another one with ramps and landings, and ramps there is a certain ... there's guidelines with how long it can be based on the ratio of how high ... So there's only a certain amount of ways you can do that in such a space. And figuring out how to do it is just like a jigsaw puzzle, so I really enjoyed that. Other people didn't, but I thought it was quite fun. The problem-solving aspect is (really interesting for you.)

And then working on Vectorworks, I really like Vectorworks – the computer program we work with now – I really enjoy that. Because last year I enjoyed it too, but I wasn't nearly as good because we were just learning, but this year it has just got a lot better and I'm able to make things now that I wasn't necessarily able to make before. And another thing I really enjoy is creating my own furniture whereas I know a lot of people import it in from Google Sketchup. Initially I didn't do that for myself because I didn't know how, but since now I'm in the habit of making my own furniture I just prefer it and especially since, if you find something on Google Warehouse like a chair you like, there's usually something about it you would change. So, it's quite good to just make your own chair and in your presentation say, 'I based this chair on this design, this is a real chair that exists, but I've created this in a slightly different way'. So, that's another thing I really like. And then I suppose making a presentation is really fun, I enjoy that. Again, it's problem-solving. Just having one A4 sheet, how much information can you put on it without overloading it? The layout of things, how to make it look nice. Those are the three things I really enjoy.

19. Do you prefer thinking of the holistic picture or the details?

I prefer thinking about the details in the place, I think. Just like having the whole feel for the space that you can see in the rendered images, but then focusing again on the table that folds away or the pin-up boards that fold or the kitchenette that folds away. So, again, having a general aesthetic throughout the space, but focusing on the wee details that I added.

20. Do you prefer to solve problems and find solutions through words or practically?

I have ideas and I might sketch them out, like the design I want from the plan view, looking straight down. But it's again going into Vectorworks and seeing what will actually work practically, I think, that's the way I go through my goals.

So, maybe both? (Yes.) So you think of ideas and then you start sketching it out?

Yes, to see if it works.

Well, I think because again since I start working on a project right away, I'm able to have the luxury of time where I can create all these different ideas, and then just ... if building it on Vectorworks, you just see whether it's going to work or not. You even don't have to necessarily finish building it. Like things that fold down from the ceiling, in this project I was thinking about doing that, but then the beams were in the way and I thought I can't do that. So, it's just again practically, when you're working, re-scale measurements in Vectorworks, you can clearly see, like if I want to create one large table for the designers and things. I think 'OK. I've created it on Vectorworks, now I've put it in the room, and now it doesn't work.'

21. Do you prefer gathering lots of possibilities or deep facts?

I think I like to focus on just the general project, but then I have wee details in the project that I focus on, not going fully in-depth and focusing on one such thing, but when I have a bigger project like in my library project or in my speciality shop I just had this one decorative thing that meant something else and then it was throughout the space. So, focusing on the big project and then practicality and floor plan and all that stuff I just have this one detail that I explained, but I don't go fully in-depth of the history of that detail.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I think I'm more of a conventional person when it comes ... because I usually work it out within the computer software where I think other people ... I think St.G had mentioned that, 'For the lighting I actually create a paper cut-out in an experiment'. And that's something, not necessarily more risk-taking but it was different, and it's not something I would think to do. I would just think to experiment again on the software. So I think I do it in more conventional ways, I suppose. I'm a traditionalist; I like my own computers. Personally, I don't even have an iPhone yet, because I don't want to get tied down to such a thing.

23. Do you prefer to organise your work or to work free style?

I used to be a free style person. But now it is different. Yes, because I see people who don't show up for reviews and things, and I think, 'How can you not?' I just feel so lucky to be here so I try to work as hard as I can.

24. What is your motivation for your project? People or tasks?

I want to present the best that I can be, because I have an overwhelming fear of disappointing, especially my tutors because it's hard to get into G. School of Art and I just feel so lucky I got in. I think, 'How did I get in?' So I wouldn't have the guts to present

something that I'm not proud of. It is about not wanting to disappoint my tutors, that's a part of it, but it's mostly because I want to see if I can do the best I can.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

That's a difficult one, because I wouldn't ... The thing is, whenever I know that I've put in the work and I've done it the best that I can, it doesn't matter if the tutors have feedback or criticisms, that just makes me feel like I can make this space even better when they tell me that. So as long as I know I've done it to the best of my ability, it doesn't really faze me if necessarily they don't think it's the right solution. Because I don't think I could ever put my heart into it and they are going to feel, 'This is horrible', or something like that. Because the only way really I feel I could disappoint them is if they feel that I haven't put the work in. I know that's not ever going to happen, so it's just more...

26. How do you perceive criticism? Tactful or direct?

It's like when I said earlier that I don't want to disappoint my tutors, it's the only thing that I mean, is that they think that I'm not putting in the work, not necessarily that, you know they'll have criticisms of the designs I create. I'm more paranoid again of thinking they think I've slacked off or I haven't put my best into it, so since I know I always do put a lot of effort into it, again it doesn't necessarily matter if they don't like it or they have criticisms.

It's just that you do your best?

Yes, I always do my best.

27. What is the social environment that encourages you to work in groups?

Not being listened to, I suppose. Not necessarily that your idea doesn't get in, it's just if there's a bunch of people and you want to comment on something, but everyone's talking. So it's just finding that balance and being more practical thing that is annoying. I suppose maybe dividing up the work is another practical, more annoying thing because everyone has different strengths so it's good when they're all different so it's quite easy to delineate all the chores and tasks and things. But when you've all come to an idea that you all like, then it's just like, 'OK. You guys each have to do different things'. If you don't want to do the thing that you have to do, but you were assigned it, it's just - you have to do it, so I suppose that's the most annoying thing.

28. What do you like more: starting or finishing tasks?

Finish it.

29. What is more important to you: being creative or being organised?

The practicality. I feel that I could work on being more creative, coming up with ideas that I wouldn't have thought of before, but still having that practical... so always having that underlining thing that is practical, this could be used in real life, this could be built, but maybe making those practical things more imaginative than maybe just a foldaway table, I could have done something else, but ...

What do you mean by 'creativity'?

Well, I suppose ideas that aren't the norm, like I think a foldaway table it's not too out there, that's been done and things, but I think there are ... pushing your ideas to their limits. Still being in the realm of practicality but just being something you wouldn't have thought would work, but it somehow does work. And I feel like I could push myself to do that more so it's something I need to work on.

So, if you want to define 'creativity' in interior design, how would you define it?

I would say just imaginative and maybe unexpected, I suppose. I think those are really the only ways, because interior design is creative in itself, like even just picking different materials and combining them in other ways, because no two people will do that just in itself, but I think again, pushing it, pushing my ideas, especially like my furniture creations, because I create all my furniture anyway. So be more imaginative or just less predictable, I suppose.

30. Do you prefer working following a structure or being spontaneous?

Well, I think I work to the deadline, as in reviews. I know I want to have rendered images of my A3 presentations, but that's never really in my mind, I just kind of do work, and again I go back to experimenting and I have stuff already in Vectorworks, so it would be basically like me presenting my sketchbook. It's just that because I sketch in Vectorworks I am able to show the rendered images. So I don't necessarily think, 'OK, by this week I need to have the lighting and the furniture done, this week I need to have this stuff. It just comes as it is.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Well, I think I prefer the quiet, but not necessarily serious. Quiet, but casual. As in I can sit here and I can listen to my iPod and be relaxed, but I can still get up and ask someone, 'Can you have a look at this?' or, 'May I see what you're doing?'

I can read a book with the TV on and I don't mind when people are talking and things. So I don't necessarily listen to my iPod all the time, I take my headphones out. I don't mind when people are talking, it's just sometimes people get a bit rambunctious and they ... I don't know, it just gets a wee bit loud and that can sometimes be annoying, but then I just put on my headphones and I'm fine. So I don't mind if people are just talking, just like the general noise of being in a studio, that doesn't faze me, but then there are sometimes a couple of people can still get a bit rowdy and that's fine. I just come up here and I have my headphones on.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Well, I suppose it is a bit of anxiety because the only thing is, just having the proposal and all the rendered images look as clean as I can and make sure that the way you've presented it makes sense so I suppose having that proposal, because again this proposal's for the interim review, but I'm so going to want to clean it up and things for the final review. So the only anxiety for the final review is having the proposal that looks really good but also makes sense. So that's the only thing I work towards, I don't think about it really in the beginning, it's only really the three or two days before the deadline that I think, 'OK, I need to work on the proposal.'

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

White, yellow, green, black, red, blue.

Yes, I was just interested when you said, 'Managing the thinking process. What does that mean to you?' I decided ...

For example, are you using all these kinds of thinking through your projects? And in this order somewhere in your projects, through your projects? So you are aware of the importance of using the information, the values, the creativity, the actions of the cautions, the feelings, the emotions, so you really know all these kinds of feelings, and you are using them in a specific, strategic way?

White, yellow, green, black, red, blue.

I suppose I do, but I don't necessarily think about it. So, I think this is the right order.

Sure? Would you like to change anything? (No.) Or add in anything?

No, that seems fine. Because, again, it's just having information, like the plan at my disposal, then going through all the practical things. Yes, and problem-solving, why this works, why this doesn't work, and then, yes.

That's great. Thank you so much, Good luck with your project!

Students code: St.G

Institution (2)

Date: 7 April 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

I was always interested in how people move through spaces, so I've studied architecture before. So I got the outside of it, but I wanted to go into that detail that interior design goes into and here especially, I'd say it's more, compared to the other ones I looked at, you go into more detail about how the whole thing is, like the materials, so if that experience was the main part I wanted to get

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

I thought here was the best place for it.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Well, as I said, I've studied architecture so I've got the mindset, if you like, of someone that you're designing for. So I've got that and I think that's an important skill. Because if you're designing for someone, as you are on a lot of these projects, you're imagining, so you have to guess, sometimes if you ...

You have an imaginative mind?

You have to put yourself in your space and work out how you would use it as a designer, for example, that helps. And then with computer skills and things like that, I think I've got that covered but I never used Vectorworks before from when I came here so that was quite a jump, to go straight into second year, so even now it's hard to pick that up.

So you studied architecture? (Yes.) Whereabouts?

Across the road. Just across the road, yes. I changed course. The mindset and thinking process is completely different for the same thing. It's quite surprising.

With architecture you get your brief for the building, then you design the spaces, more like a plan, so you say this room's here, that room's there and that's your overall scheme. Whereas here you then take that a step further and then you go into like micro-architecture. It's that sort of thing. That's what really excites me about this course.

Which one is touching or is more related to the human or end-user?

I think interior design is more human-related. I think architecture's more the architect's mind and the client's budget I think whereas here interior design works better for the client and the person, I think gets, you get right into it. That's why it excites me more, you can imagine it better. Like I just say, 'This is a big building.' The client says, 'What's next?' I think interior design covers that much better.

6. How would you describe your experience studying interior design? Why?

It's challenging sometimes, I think. It's usually a good challenge because you get to. When you work on projects, even on your own, you can talk to others, and listen to different answers in the studio environment which this place is famous for. You learn more from each other than you do from the tutor. So, when you discuss things you can argue with someone but you both end up better off for it, because you're thinking about your design in a different way. But if you're sat at your computer and didn't listen to anyone, you might spend four weeks with tunnel vision and then if someone says something that you might not like, you might think it's criticism towards you, but with the studio it works better because you can all sit on a sofa and talk about it and then go away again and think about it. Each week is a different thing. I love the reviews about it and then sometimes you can sit in a review going, 'I don't agree with that completely, and then wait to see it. And then you might say it out loud and it sounds different and then you learn so much. Just within each other.

Because you might see a fine work upstairs that works downstairs on the same project. You might be working so similarly. You don't see that until you talk about the work and then you actually find out you're doing something almost very similar to someone else, like your

design might focus on the same aspect. You've not spoken to them yet, it's when you come to the studio you go, 'Ah, that's very clever', and then you can develop it yourself.

And if someone judges different from your point of view, for example, how do you feel about that?

I quite like it because it opens you up more. Because everyone, with G. especially, everyone is from almost another country completely, each person is from somewhere else, so they'll bring in their own thing, so it's international. Everyone's got different... you're not all the same. It's not 17 people all saying, 'Yes' to everything. People say, 'No'. And then when someone says, 'No' to you, you get to think, how do I convince them to say 'Yes'? Normally I agree with it now I've seen it, so whatever you think or experience, a design gets better because you've got so many different viewpoints, and looking at it for that same reason.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes, I'd say yes to all three, I think. I suppose you could be sitting late at night and your review's tomorrow and you need help, and someone else might be doing the same thing, so the more people work on it, the easier it becomes. If you can talk to someone about problems you're having with what you're doing or things, like the studio works well for me because you can go off and talk to anyone. But with being 'encouraging', the walk to my desk in the morning, you get to see different people's work, just lying on the desks. You get to pick up stuff. So year to year, then you can see some fourth years' or third years' work and you might see something that interests you and you can ask them about it. So then you start to get this whole web. You can get everything you want and it's like one massive resource you can access yourself. And that kind of gives you more ideas, so it is sort of inspiring for that as well. And you can feed off it really well, I think.

Yes, because you can see people doing really good work and you might think, 'Well, mine's rubbish. I want to do as well as them.' So it spurs you on a little bit. Or if you see someone and they've got tons of work and you're sitting there with a sketch, you may think, 'Oh, how did he do that?' And then you can get going. Because if you're just sitting and staring and ignoring everyone, you become lost. And if you can see people all going off at different paces, you can see you doing that as well. Then everyone ends up kind of going at the same pace.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Yes. I sort of developed this skill in architecture and here as well I always start with a composite that I get from the brief, from the feel that kind of gives me. So my interpretations

of it, that's my big idea. The big idea of this project has to do that for the person using it and then that's where I go next. So then I think, 'How do they go through the space?' and things like that. What sort of furniture and things help create that, so it's always about the experience and the concept. That's my two things. And then managing that and I end up ... I always do like a little plan, I think, like a checklist of projects.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Sometimes I think the brief's very vague at the start, but then I manage to go through it all. But then I think it's probably meant to be a bit vague, so you can take your own thing from it, so if it was very specific, you'd end up with a class full of the same designs. So if you move along a bit, if they tell you what the brief is, what the expected outcomes are, you've got that middle bit, where you can do your own thing. I always tend to vary it, like do a bit of research and look for precedents of the same thing, and then work from that. I used to think the briefs, because they were so vague, I was unsure what to do, but as I've worked over the projects this year especially, you understand that they're looking for that sort of thing. How am I going to show that? And then you get to do your own process.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think with me, I work with my big concept at the start and sometimes that blinds you to other things. So if you've got this big idea and you work on that, if you don't talk to other people in the studio about it, you could end up doing a project that has nothing to do with what you started off with, because you could just go away on your own and work on something. (So you mean in the early steps?) Yes, in the early steps it's really important to have contact with your tutors early on, so you can bounce ideas as well as the other people in the studio to see the big things because if you're then going to do a lot of work for that, you want to make sure it's the right thing to do, the right foundation. If you get everything right at the start, then everything is easier enough afterwards. With this office project, with the temporary furniture and things, how it can move around. And then made my big mood board and I thought that's what I'm going to base everything on. So every week that I worked I just checked my initial mood board and research to make sure that it tied to it so I don't go in the other direction.

So how do you work on avoiding this closing up in the concept step?

I would stay in the studio straightaway when you get a brief, because you come in, read the brief, then go away to work on it, to go out and do something. So I can stay in here and that

grapevine, so I like to do the work here and then leave everything, then I can come home and that's it. So all the work I do, I want it all sorted for the next day, so I know what I'm doing. When I do my list, I do like the next day.

And you think this time, it's enough for understanding the concept, for actualising the idea?

Yes. What tends to happen with projects is that the first two weeks everything's kind of set and when you start to finalise your concept and your design, you then leave the concept because that's it sorted and then you go into the really fine detail of ... the technical detail, measurements and things like that and then everything's finalised. But I don't like to finish a project completely because then that's it. You can't do anything to it. I like to leave it open, so it's like a 'What if?' So I can always come back to it.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

When I was applying to university I knew roughly what you do. It's like a more independent thing. And then when I got here and you get all this group work, that surprised me the most, how involved you are with other classmates or even other departments.

So the group work was the most surprising thing for you?

Yes. Because I was so used to like at school where you get your project and you work on it then you hand it in.

Was it a good surprise?

Yes, it was really good. Even then when I'm working on these projects on my own in the class, I can still talk to other people in other departments like graphic designers or product designers. So your furniture, if I've got an idea, I can just go down and ask someone if they've got anything similar. When I was in architecture, I'd do my big building, then I'd ask some graphic designers what they think of the way I presented my work, so I could then sort of work between the two. I had the good idea, do my own practice and do my competition entries. I mean I work on competitions with these projects as well. So I do work on how to present it and how to design things, you do need to talk with different disciplines on how to do it. That's what I was surprised with, just how open everything is, that you can just go and ask someone else something or do that.

12. How do you see yourself as an interior designer in the future?

I've been thinking about this a lot recently, where'd I see five years or ten years, what my kind of work is. I used to like big things like galleries and exhibitions and I'd love to do

something like that, to see how that works, but I like the smaller things, so if I was to do a small shop or a little restaurant, you get to do little details. I like doing graphic design as well. I've always been interested in that and with interior design you can do office interiors or corporate, companies and branding, and that really interests me to take someone's ideal and then visually show that within a literal stick it on the wall or if the space creates that. You see that with Google offices, how all their furniture works, even the Lego offices use real Lego and things like that. To see a designer or a design team do that really interests me. I would like to do those kinds of projects. Even to like a big one, because it works with my big concept and then work on that, I think that fits like a competition design sort-of format. And I've worked on quite a few competitions now. I quite like that kind of speed, the pace there is because everything's quick. With architecture, you'd work on two projects a year, maybe three, here it's a different one every month or every five weeks, it's that kind of pace. So I'd like to keep that up when I'm out afterwards, but I'd like to go somewhere and learn more from a design practice itself, just like the workings of it.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

It's a bit of both. With this book that we're making for a project last week, we've been discussing a lot over Facebook, so everyone is talking about what we want, on Facebook, so we're all posting what we want... So over the last couple of days, we've had discussions about the title of our book and everyone's got something to say. And it's a way of taking all that and then summarise it so most people get what they want or things like that, so it's trying to get it finished in time. I think it's there. I think last time we had a vote on two titles and then had to decide and that was it. So I quite like the group project. I've done bits of project management, ones before as well on other schemes and things, where we have to do something in two days or three days and get it done and finished, I quite like. Organising it so it sort of runs smoothly, so I find it's the same with my 'list' approach to projects. But I like working on my own as well as I know that everything's so, so I can just go do it, if that makes sense? So I've got the concept and I know what I'm doing, it's just a case of sitting and working away, I quite like that.

14. Where do you prefer to work on your project? Studio or home or another place?

I think the studio is the best place to work because I can't, sometimes if I was working at home I get distracted by the TV or even just going for a cup of coffee. (At home?) Yes. So in the studio I can just sit and work. And then you can talk to other people and do that, and with architecture it's best and with here as well. I know some people prefer working at home on their laptop and I don't know if I could do that, I'd get bored really easily. Or I'd get mixed up,

'Should I be doing my work now? If it's due in two days, who am I to be sitting here with the TV and things like that, it's like coming into the office for the day, doing my work and then going away again home. If you know you have this much to do, why not just do it here at one time rather than scattering it about? So it's like time management rather than just projects.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

It is this big idea. If it doesn't work, that, then I probably won't do it and I always take bits off the brief and add that in to the big idea, so that if I can't answer the questions that are on the brief, I probably won't do it because it's just the idea doesn't work.

16. Are you confident sharing your ideas with your peers?

I'm quite happy to show it to someone to get feedback in the studio, that's why I really like doing that, then I can see the errors as well and then two people are solving their own design as well as others.

17. Do like presenting your project in front of others?

If you have one design, I quite like doing it, but I don't get too personal with a project, because I know it can change so quickly, so there is no point in getting attached to it. At one week, the project can be called 'Design 1', it's 'Design 2' afterwards, so you don't get too attached to it.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I think for me the most important thing is presenting your idea at the end, because that's where you get the best feedback, because by that point you've sorted everything out, so presenting your project. (So, 'I?') 'J' - presenting your project. I'd say that one. I love doing pictures and presenting my work anyway, because you have to convince someone else that your idea is good enough. So by that point my confidence in my own work is high enough that I can go and say, 'This is my stuff, what do you think?' Rather than in the early stages, you don't want to show someone yet because you've not figured it out yet, whereas at the end, you get to do it and then get the feedback. I normally practise at home in the morning, put up my own work and give a presentation to myself, so I can work through it. Because I love the review format, so I think that really works well for feedback. Even if you hear yourself talking about it, you can get your own feedback as well, I think, if that makes sense? (Yes, it does.) Because you can spend so much time thinking about it and drawing it, it's only when you start talking about it, to get someone to understand it ... and with sketching, that's what I do during lectures and that, I'll write down what things are, draw something. I think that's how I work, so I know what am I listening to and then always sort of working when I'm doing it and then it's really nice to finish the project and present it. And then you can relax knowing that you've done all you can.

19. Do you prefer thinking of the holistic picture or the details?

Probably more a holistic approach, so it's like you consider everything, how it works with something else and then go into the detail after that. (So let's say it's first holistic, then details?) Yes, holistic first. I think the general experience of someone going to use this will be like this; then pick out the details afterwards. So you're going to get the best of both without closing yourself off to one or the other. I quite like the holistic side to it. I consider all the different scenarios, how someone would use it, so for the small office, I think how the designer uses it, how a client uses it. That sort of process. So you think how all these are different scenarios and then you try and cater to the best ones.

20. Do you prefer to solve problems and find solutions through words or practically?

I think it through in my head first and then I do a sketch, like a little diagram. This is the small office, like a kitchen that folds away into the loft, so for me to visualise that and just do a little sequence of how that'd work. I like to see things more visually than with words. Or think about it or do it in Vectorworks and make a model and then try again. I like the trial and error that you're doing it with models or drawings. (More than just words?) Yes, because I can then add in if I was to show this to someone, they'd probably understand it better if I drew it out or made a model of it rather than just told them.

21. Do you prefer gathering lots of possibilities or deep facts?

Yes, I tend to spend maybe a couple of hours, after I've got a brief when I've started a project, just getting general research on how everything works. (So wide research or deep research?) Probably wide, I just get a wide range of things first so I can get more into the mindset of that project. For the small office I looked at office design, but as well I looked at furniture design and loft design because I think it was a small space so I looked at a lot of small spaces, so even caravans and foldaway furniture. So I looked at that. So it's not necessarily all office stuff it's more a wide range to introduce that into the same sort of thing.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I quite like to take the risk, because it's all that trial and error thing where you don't know if it's going to work or not. But maybe if it does, you try it again. So it's better to try it and see that it doesn't work than to not try it at all. As then you'll never know. You could do really safe design really easily, but you don't know how far or how well you could take it. So you go to the extremes first and then draw back a little bit, so you know it's there finally. I quite like the idea that you could do something really crazy first. And then work out how it's actually going to work rather than just do the minimum requirements of the project and then leave it at that. Because no one will employ you if you're not going to do something interesting

Yes. I quite like to put the newest things in. Before Christmas we had to do a library project and I went with the idea that you type on a computer the book you want, and then a little robotic arm goes into the back, picks the book up and then brings it to you. So it's the opposite of you going into a library and going through all the bookcases for what you're looking for. (So, it's recent with you?) Yes, it's things at a university in America that has this system so rather than all the students going into the bookshelves, it's all the books are in storage and then you come up to a computer and type in what you're looking for and then it brings it to you. That as well with QR codes, you get those now, I thought you could scan that on the computer. So maybe you reserve the book online, then you get the code, then you scan the code, find the book. Because I think by the time that I graduate it's going to be two, three, four years into the future, so stuff's getting cheaper to buy then anyway so if you open yourself up to all these new ones, by the time that I'm working they're going to be in general use. It's good to get them now, and explore and see what happens with them because you might pick up something you quite like and that'll give you your signature thing that you do.

23. Do you prefer to organise your work or to work free style?

Yes, I do for myself. So over Easter, I had a big project and I wanted to do little bits to it, so I wrote a little list, put a little empty box next to it and tick off afterwards so you can see what you've done. So, if I wanted to re-do a plan I'd just write that, do some different renders or

make a model, just seeing a list of things that I can do for a day and then set myself up with time limits. So like today, I may come in, do all this and then go away again. And that's the way I work through it. So when we're up for reviews or tutorials I have a lot of work to talk about. Because I used to find if you don't have a lot of work, that good idea, it's hard for someone to understand. If they can see it, it's almost like if you 'overwork' at the start, do a lot at the start, you can go into things easily then work on it from there. (That seems really organised.) It seems organised, yes. But then I don't know if it works all the time. (From what I hear, it seems to work very well with you?) Yes. I mean I came in at eight this morning and made that new sheet I had for my project that was all this morning's work. So I came in and had my list of stuff that maybe I would choose the furniture, render it and then make a sheet of it and print it off. I did all that this morning. So that was me.

24. What is your motivation for your project? People or tasks?

There is always something that interests me from the brief, maybe it's the competition aspect when everyone else is doing the same things, it's interesting if you say I want to do this to the best I can be. You start to see other people and you think, 'Can I do that a bit better or are they doing it better than me to solve the solution?' So it's ... (So the competition in a sense is your motivation?) Yes. It's not that I want to be better than everyone else, but I want to be 'as well as'. I like the way of going through that process. I want to learn as much as I can. It's important when you have the opportunity because you're never going to have this sort of set-up again, so you may as well just take it on now and then use it later. I've done a lot of people mentoring and student mentoring. I've been a mentor in schools before, so you go into schools and do projects with them, so I've tried that. I quite like using my advantage to teach someone else what I've done. So I like to pick up things when I can so I might use them in future. It's good to know that you have it. So it's that kind of preparation for going out to work.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

That's quite a tough one. It's probably a bit of both, that I want to do well with my grades and I want to know that what I am doing is right for the course. So if the tutors agree with it, that helps me to assure myself that I'm happy with it. Because it's really good to see when you get to the end of your project, you go, 'Wow! That's what I've designed for all these weeks', so it's really nice to see your own work done. It's also good to see that it is good for the field that you're in. Because there's no fun if you like it, then it doesn't work in reality, whether it's a design that might not work for the best.

26. How do you perceive criticism? Tactful or direct?

I'm not going to be bothered how they say it because I know what they mean, because everyone's different, everyone's got a different way of saying it. You assume they are going to say something constructive. They're not always going to go, 'I don't like that.' And then walk away. You know they're not going to; they might give you advice on how to do it, just as they would expect you to do it to them. I quite like it if they don't like it because then they have to tell me why they don't like it and I can explain to them why they should or then I maybe see something I can adjust.

27. What is the social environment that encourages you to work in groups?

I think if it was all quiet, I'd work slower, whereas if there's noise and people about you work a little bit faster.

28. What do you like more: starting or finishing tasks?

you know that on the morning of the deadline you can relax and just walk in and go, 'All my work's finished', that feeling's a lot better than rushing everything through to get it finished.

29. What is more important to you: being creative or being organised?

I think it's more the creativity, essentially that's more important because the more you can think or imagine things like that is going to help you throughout the rest of the course. I think that's more important than the efficiency because you could do everything the way it's supposed to be done but it might not be very good. So I think it's more about understanding what's good design and how to do that and then get it finished for this time.

30. Do you prefer working following a structure or being spontaneous?

I quite like having a structure; you feel everything is going direct. If you do too few you are going to end up with work piling up, so two weeks later you realise you've not done an awful lot. (And how does that seem to you?) Yes, because I've finished a couple of submissions where we hand in a year's folio and I've only started the week before to tidy it all up. (How did it go?) I'd then be busy for one week solid till you've got it all finished, whereas I knew months before I had the time to do it gradually. I like to take my time with it and get it all done as it's coming because you know it's going to be busy for one point and then you've got the summer off, so you know, just do it now and then it's easier later. But I think it's more that I've gained that over experience – trying to avoid all the late nights.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I quite like an exciting, even a noisy environment, because it gets you thinking more. I think if you sit in a quiet room on your own that can be quite dull or boring. So that's not going to excite you to be creative so if you're in a busy environment already, you work better. I prefer that. You can see some people who sit with their headphones on to block out all the sound when they sit in the studio. Whereas I quite like just to hear everything going on, because your brain's always working. If it was just to focus on one task on its own, I think I'd get bogged down, I'd work slower.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I think it stimulates me to the extent where I know it has to be finished by then. So I work on it then, so it's finished. That's why I set my own deadlines as well so it keeps you at the right pace.

Yes. If I know that the deadline's coming up, I'll work harder. However, I wouldn't be put off either like you get some people who are stressed or scared by the deadline and that can stall people working if they know the deadline's really soon. Whereas, when I work and I know it's going to be there, and I've had a couple of times when I've come in, I've not washed yet and my clothes and bag and everything are in a mess, but everything's done. You can come in relaxed and just go, 'Yeah, I've done it, I did it two weeks ago, it's fine, yeah.' It's more rewarding I think as well.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

I think the red one I would put first because you have to go with your feeling with a brief or something. And then have the white card to back that up with, information and research. And then probably the black one, so I can put myself into the boundary of knowing what to do properly. Then the blue one, so that would be me doing my list or deadlines to myself to organise it all. Then probably the yellow one, where I can test my theory out. And then the green one at the end, just to explore, 'What if something's different?'

So, red, white, black, blue, yellow, green. Excellent.

A colour theorist could read something into that.

That is what comes up in my study. Thank you so much

Institution (3)

Second Year Student

Students code: Ri.C

Institution (3)

Date: 21st of November 2014.

1. Why did you choose to study interior design?

Yes. You can, of course. It's, at home I study graphical design, it's a combination of interior design and graphic design that intrigues me. So that's what I choose for my minor period, to study interior design.

2. Why did you choose to study interior design in the UK (for international students)?

Originally from the Netherlands. Yes. I am. It's mainly because of the language. English language. I want to improve it more and I really liked Anglia Ruskin, the website was really clear about what they expect from us and what we should do here and we emailed them a few times, so the combination of the country and the courses they applied here. That's why we choose to study here.

3. Why did you choose to study at (the name of the institution)?

And, well I'm actually studying with a friend from my home school. she is studying photography and yeah, we both wanted to study, something else. We both studied graphical design at home we were in the same class. So she has to have the same courses or her interests at the same school cause I study interior design and she photography. So we both had to like the courses to be able to study here.

4. Which year are you in?

At home, or out here?

Sorry, can you tell me more about your studying at home?

I can. I'm studying a bachelor graphical design at home and in Netherlands it's a bit different. You study four years for your bachelors, which one year is a minor period. What I'm doing now, you can do an exchange programme so you can study abroad or um, at another school in the Netherlands and I chose to study abroad in the UK.

Well, it's four years of studying so I'm now in my third year, so I have one year of studying left and that's like, well, now it's one semester so I'm doing my internship in the spring and after summer I will start my final projects and hope to graduate in May 2016.

5. What kind of skills or interests do you have that drive you to study the interior design programme?

That's a good one. Well, as a graphical designer, you think in 2D, but I actually think a lot in 3D, so I see both options as well in 2D as in 3D, and graphical design gives me the option to think 2D and 3D.

Do you mean imagining?

Well in thinking process of designing something, and I think I have a big passion for interior design, but if I would choose interior design as my bachelor, two years ago, I think my thinking part would be 3D and I love the combination of 2D and 3D.

SO the, the tension between 2D and 3D is really intriguing me. So that's why I choose graphical design, because I think it gives me the option to also think in 3D and interior design is focused on 3D and not as much in 2D.

Is there any other reason to choose interior design?

Well that's my main motivation now, because I want to make it more clear for myself which path I wanna go in the 2D and 3D process.

Most motivation, you say? Most motivation, or,

Yeah. Before I came here, that was my goal, to discover what path I should take in the 2 and 3D process.

Can I ask you why not product design for example. It's also 3D. So, from your point of view what's the difference between interior design and product design from the aspect of 3D?

I think it's mainly, product design is more marketing. I think the main focus is on a group of people and with interior design, of course, you have to take notice of more people, but you can focus more on one specific need of someone, it's more on a personal level, interior design, I think. And product design is more marketing, yeah. More theoretically based, and I think interior design is more personal. Yeah, yeah. In the needs of a person.

6. How would you describe your experience studying interior design? Why?

Well it has been a transition, because I noticed that I think a lot in 2D, as although I can switch, I, my first thoughts go in 2D and then I have to trigger myself to do it in 3D.

So that was, actually, that I made a good choice studying graphical design although I think also in 3D, it was a confirmation for me that I'm doing the right thing, but that interior design triggers me in different ways. And I really like that.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes. Well I like the idea of the studio environment. Although yeah, I can compare it with my studio at home, or at my home. I was studying in Netherlands so it's helpful for me in interior design that I can talk to other people about your work, and that it's open. And then, if you go to the support, I think in the environment that it is now, in the Anglia Ruskin, you do feel the support of tutors and people you can talk to, but not as much as, from your fellow students. Because we all work in groups and your work is in books, so you don't have the, you can't hang your work up on the wall, or, so everything is in groups for yourself, you know?

In the Netherlands we have a school of art, I'm studying there, and every space is open, so there are only walls there are no doors in our building and all the walls are white so you can paint on the walls you can hang your work on the walls you can do anything with it. So, it's a really inspiring environment, it triggers you all the time and it encourage you to talk to people who hang their work on the wall. You can ask them, 'what did you do?' you can maybe stand there for five minutes and just look at it, and you won't do that so quickly if someone has it in a book. I notice the difference here [in the UK] that everyone in their own Zone, in their own vibe. So, I think it would be better if there's more space to show your work. Especially in the process of designing, it's important to get different views on your work. So, you can think about it, and you do not have to change everything but I think their appreciation about your work is really important. And I do miss that a bit in here.

So, the, the step is bigger to ask them 'what are you doing?'

So, the encouragement mainly from the tutors and the teachers, because we do every lesson they make time for you to talk, but I do miss it a lot from my fellow students.

And inspiring, well, I think it can be more inspiring if there's more room to leave your work on the wall and inspire each other more. I think that is the main.

And that would really encourage more discussions and developing, like quicker development for the projects and ideas?

Yeah. Yeah, it's really, yeah, I noticed that my fellow students are finding it really hard to talk about their work. And because I am forced, not in a bad way, but I'm forced to talk about my work all the time in the Netherlands. Because it's out there, people ask me, what are you doing? And then, I have to explain it all the time, and It triggers me. More. So, I feel free to

talk about my work. And I think the people, my students now, especially in second year, are a bit apprehensive to talk about it.

So they're a bit shy or don't know the right words because they haven't done it a lot. So I think there are a few good things about opening up your work process, so that's talking about it encourage other students. It's for yourself so you talk about your own process, make this more clear for yourself.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I can. I started just a new project that is really going well in the process, so I think that's a good example to describe how I'm studying. So I first look at it in the big perspective, and well, I'm doing a project about a harp. A harpist actually. And I'm designing a space for her. So I first take it really wide. So where she's from, her hometown, till the, how the harp is built. So everything in between I start to, yeah, touch it. I make models. So it's really wide and it doesn't lead to the space I'm gonna build yet, but it's just a ground I'm making for myself to grab things from and then I'm gonna narrow it down to the final project.

So, half way, I have certain points. Or certain, specific things I want to express in the room. And so that's, that's gonna be for this project the harp and her home town. That's really important and she has to invite all her friends and family because she travels a lot, I figure, so those are the things. And I research them all, so I can pick things from it. And then I'm gonna, build it more clearly, so it was really experimental, all the ground floor projects, and then from there I feel like I have a good base to build my final design on. So you can, yeah. You have a great foundation to support your design. Otherwise it is 'yeah, I build a room as a harp, yeah'. It doesn't make sense if you, yeah, research it better, you can explain your design and it will more convincing if you have a good foundation.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Usually it is, but I think with every brief, if you study it for a, like a week, you understand it better or differently than the first time you read the brief. So I think it's a process. If you read, and for the first time you think 'oh, it's like this' but if you start working on it, you see it's maybe different, or you can interpret it differently. So I think you need time to process the brief.

Can you tell me roughly how many times you need to read it? Or, do you read it, for example, every week? Do you read it three times in the beginning and that's it?

I think I read it the first week, like three times, and I take notes for it, and then you start working on it for like, one or two weeks, and then I read it again to look if I'm on the right path. And then, half way or near to the end or three quarters, I would read it again. To see if everything I've done is on the right track, the same as the brief.

And like, milestones. In the milestones of the field project. So, in the beginning, in the middle,

Yeah. Three quarters. Yeah. Yeah, because it's, otherwise you're doing something that doesn't make sense. So I think the brief is very important to understand where you,

To keep you on the right track. Rather than drifting.

Yes. Exactly.

Ok. Ok. Interesting. Just to make sure about this question here, so you read it again and again, but you understand it. But you think it has different meaning from time to time, or you just want to remind yourself?

Yeah. I think the first week or two, I maybe interpret it differently. But at that point you've done a bit of research and you can, yeah, position the brief in your project. And then it won't change again. So I know where I'm going to, I know, yes.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think working with other students.

Oh, really. Ok.

Well, it's not a big issues, but it's challenging. If you are with someone that you don't connect so well with. So you need to find a way to make the project work. I have two projects now, and one, with one I can work really good, and we have a certain vibe, so we reflect on each other and we, yeah, we talk really easily. And the other is like, ok, you say something, I say something, and it's more challenging. But I think it's a good thing that we work together because in the future in your work you have to talk to other people. So I think it's a good thing, but it's still hard because you want to get the most out of the project and sometimes you feel like if you're not in good contact with someone then the project will reflect that.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

I don't really understand the question, sorry.

Ok. when you read the website it was clear for you what the programme is and what's expected. So, when you came over, and you start studying in the actual studio, did you find it the same, or you didn't expect?

Ok. Yeah, and I did expect more of theoretical subjects and that we only have the studio, I only have the studio. So I can focus more on the process and how to do it and, so that was a good change.

Excellent. So you expected more theoretical courses.

Yes.

12. How do you see yourself as an interior designer in the future?

That's a good one. Well, like I said before, I hope that I can combine it in future with graphical design. But I'm not sure where it will be. I hope I will work in a team that inspires me, and that has maybe international ambitions because I love to travel. I hope I can see the world more.

So do you see yourself as international interior designer?

I don't know if I want to be an interior designer. I think my focus will be on graphical design but, I hope it will be, With some background of interior design.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I like both, but that's not the question. Which one I prefer.

I have now a project that I do in a team and a project I do alone. And I prefer working in a team because it triggers me in a different way. You need to consider the ideas of someone else and I like working alone because you can do anything you want. Although you have to take notice of the brief. Yeah. So I think there are pros and cons for both .

14. Where do you prefer to work on your project? Studio or home or another place?

I think I already answered that. I like to work in the studio because you can trigger each other, talk about your work and that's really important for me.

Because I, I think I have a lot of crazy ideas and it's good to have someone say 'ok, stop it, just go for this and this is a good idea, focus' and yeah, it helps me to focus on work.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Yeah. I think it's really good to put it in perspective, like put it in the place, or, so build a model and see if the idea really works in space.

Ok. So, you prefer immediately moving from an idea to making a model.

Well, not a final model. I think it's more esquisse models, to feel the space and if your ideas fit in the space.

So It's not your final model of course, so you can tweak the idea.

Yes.

16. Are you confident sharing your ideas with your peers?

Yeah. Well, I think I am.

17. Do like presenting your project in front of others?

I don't mind yes.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I like the framing and conceptual ideas. So A. Hand drawing. I like a lot. And presenting my project.

19. Do you prefer thinking of the holistic picture or the details?

I think a holistic picture. Because I know myself and I can get lost in the details. So I would work for hours on one detail and then, yeah.

20. Do you prefer to solve problems and find solutions through words or practically?

It's really challenging for me because I always have a lot of ideas.

Like, too much. I think you have to look at the testing. So you mostly prefer one or two or three. I think you should test it in the experiment models, but also look at the brief. So you can make a selection on which one you want to continue researching so you can narrow down on the experiments you did. What works and what doesn't work, and on the brief. So things that will help you narrow down all your ideas.

Yes. I think it is a good thing. I should focus more on the latest technologies, but I'm really intrigued by the old ones. So maybe I'm a bit scared to use the latest technologies because I don't know the outcomes, but you don't know always with the oldest one, but I think I prefer the old technologies.

21. Do you prefer gathering lots of possibilities or deep facts?

Depth. Like I said before, I need a foundation, lots of information. So is it lots of information about the project, I think that it is. So I, I choose certain things like the harpist. I choose her hometown, so I start to investigate that, research that. So, yeah. For sure.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Yes, yes, yes. Preferring. I think it depends. I think you can take a risky path to solve the problem, but the final outcome is safe and a conventional way to solve it. So the process towards solving the problem is really challenging or different. But maybe the final outcome is conventional. So I don't think you can say one way or the other.

Can you tell me what do you mean by risky?

For me, it is, it's hard to explain, because I don't really have something in my mind that I can explain it. I think 'risky' is non-conventional, like if you would ask someone and they would say, 'oh, go from A to B like this' that's conventional because everyone thinks of that, but I think the challenge of the designer is to go around that. So think, risky, I don't think I can explain it, but I think the final outcome will be non-conventional if you challenge yourself as a designer.

23. Do you prefer to organise your work or to work free style?

Yeah. It's the final hat. I think, after the black hat, you challenge yourself to make the difficulties and the cautions. And you get your final feedback from yourself and maybe our peer students. And then you make the final design.

24. What is your motivation for your project? People or tasks?

Yeah. I think I need to, every project, I need to find something that challenges me, or is personal to me, so I can put something of me in it. I noticed in previous project that if I did something what was expected from me, and I didn't find that personal touch in the project, I would get lost. So I think a personal preference in the project is a big motivation for me. And what motivates me most in working on my project, I think it is the, the journey to discover new things and making myself better. You know? Overcoming things in myself. I think that is a motivation. 'What if I do this, what would come out' and the, the adventure of the unknown. I think that's it.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think I answered that a bit in the previous question, that I find it really challenging to motivate myself, because I'm here, so it's the satisfaction that I have for my own. Of course I like it when people love my work, but I think at first I want to be happy with it myself. Yeah. Well, I think as a graphical designer and as a interior designer you work for someone else. So your personal preference should be put aside. Because you work for someone else. So if they're happy with it, you're like 'ok'. And I would show them my ideas and if they still prefer theirs or that concept that I made for him, then it's their choice.

26. How do you perceive criticism? Tactful or direct?

Direct

27. What is the social environment that encourages you to work in groups?

Interactive and open peer.

28. What do you like more: starting or finishing tasks?

I think there's a final design and a presentation hat. I think that would complete the process.

29. What is more important to you: being creative or being organised?

Or it's really important for you to design a very creative idea. It's a combination for me. I don't think I can say about creativity things because you have to take notice what people expect from you, what the brief says. So, if there's room for creativity, of course. I'm a designer I love to do new things challenging things, but if the brief doesn't allow it, I would try, I think the creativity, I would like to push it in, if it's possible. But if it doesn't allow it I don't think you can. But in a process you can put a lot of creativity in it.

From your point of view, can you define what do you mean by creativity?

Out of the ordinary. Looking differently at objects, or a room, or a space.

30. Do you prefer working following a structure or being spontaneous?

I do prefer it, because, Yeah, because otherwise I get lost. [laughs]

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I think it depends on the process where I'm in. so I think at the beginning I like to be in an active environment, so I can trigger a lot and get inspiration from it. And I think further on in the process I like to be more quiet and I can process all my ideas and design it. And maybe at the end I would prefer more an active environment to reflect on my work that I've don, so it depends on the stage of the process.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Deadline time, stimulates your ideas and motivation to accomplish your project or stress you and turn you off? Turn your mind off.

Yeah, I think it's a [laughs] a challenge for everyone, the deadline, but I thin kit challenges me more. If there's a deadline, I would work harder and motivate me, yeah, for sure. It doesn't shut me down.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Ok. So, red, yellow, green, blue, white, black. Tell me why you choose this order please.

I think it's something like this. So start with the red hat. Intuition, feelings and hunches. So I can get crazy on my thoughts. Then I would analyse them, so the yellow hat, values and benefits why something might work.

Can you go back to here, what do you mean by crazy things?

Well, I thought before about the foundation. And I think you should think out of the ordinary to create a good foundation, so I can experience not only the harp in my project but also how you touch it, or, yeah, all the things surrounding it.

Do you think this one is the right choice, because this one about your feelings.

Yeah. I think it's at the beginning, you can put a lot of feelings and intuitions at the beginning of the project, and I think you need to narrow it down as you come further to the final project, because you have to take notices of the brief and the client, what it's asking. So you have to

put aside your feelings a bit. So I think at the beginning you can get a lot of your own feelings in the project.

That's why I put it on the beginning.

Can you carry on, just explaining why you put them in this order.

Yeah. I think it's a reflection, so the yellow hat, values and benefits, why something might work, so you have a lot of ideas at the red hat and so you're gonna look at it, why it will work and what not. And then you make a selection, so you consider the brief again, and what's expected from you. And then you go to the green hat, and make alternate and creative ideas again, so you narrow it down, but you can also look into other things again. And then you have the blue hat that focus you more on the, the thinking process. So where are you actually. You investigate all of these ideas, but where are you going to now. What's the final path where you're gonna take. Information available and needed. I think it's in your design, so you have more of a design at blue hat already. At the white hat, you go more specific into details of the design, so, what's really needed and available in the design. That's why I choose the white. And the black hat, it's again a reflection on your almost final design. So, where are the challenges. Is it in the construction or the materials, or you're going doom thinking, so what can go wrong in your design if they walk through it, experience it, and then you can go after the black hat to your final feedback and design.

Thank you so much for your cooperation and I wish you all the best.

Thank you.

Students code: Ed.C

Institution (3)

Date: 27th of November of 2013.

A) Supplementary questions:

1. Why did you choose to study interior design?

I'm an international student. I live in Brazil and back there I do architecture, so when I decided to study abroad I wanted to do something more specific and I always found interest in the interior design area because I think it's interesting and challenging and it fits with my aspirations as a professional. Architecture is quite different because interior design is more like detailed. And, because of course you are dealing with the interior, you're dealing with something specific, so you need to be specific about it you know? When it's with architecture

I feel like it's h, I can, you know I can uh be more uh, broad about what I want to do with the project, even conceptually, or even drawing on CAD for example. Interior design you need to be more specific and focused and your conceptual ideas need to be more tight than in architecture I guess.

2. Why did you choose to study interior design in the UK (for international students)?

I chose the UK because actually it was, it was not um, I didn't research the country as a, as a, as a, focus, a specific point for me to learn interior design. I chose the UK because I wanted to improve my English. And because, well, it was a country in Europe that spoke that language. And also, London is my favourite city, which is really close from here. But like, when I chose going to your next question which is

3. Why did you choose to study at (the name of the institution)?

I chose here because, there's the whole, C. is a quite representative city, and I think that would really be a, a, um, a weight in my curriculum. And C. School of Art specifically because it's a well-known school of art in the whole world actually. And, from, some of my Idols studied in C. School of Art. Not necessarily interior designers, but, for example, two members of Pink Floyd studied here. There's an illustrator that I like a lot that studied here as well. And when I did architecture I studied a little about, John Ruskin, which is the founder of C. School of Art, and he has some nice statements about um, I don't know how to say this in English, I'm sorry, um, when you, when you restore an old building or something. So, he, I don't know if it's re storage or re, when you take an old building and you can do something else with it. Or, maintain it. He did some theories on that were quite interesting. When I learnt that he was the founder of the school, I said 'oh, that's interesting'. So, that's mainly the reason why I chose C. School of Art.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

I can draw. I'm not very good though. I just can draw.

I never took classes or anything. It's just something that I did since I was a child.

I don't know, it's just, you know something that you, you always think, that you would be?

Since you were a child. I don't know, maybe because I used to draw, so I would think ok, so I'm going to be an architect. Cause I know how to draw. But well I have an interest in art. I

am very interested in that and, well mainly that you know. I know how to draw, I have an interest in art and I like to change the environment around me. For example, in my room for example. I'm always changing the layout. And that's has always been a reality in my life you know. I'm always trying to change things from places, and you know, trying to make an intervention. Even if it's a small intervention like uh, putting the books in a different way, or moving a poster or something like this. I always liked uh, changing, to put it on another wall. I always had that interest in changing the environment around me. Especially the interior. Not necessarily the building.

6. How would you describe your experience studying interior design? Why?

I, actually, interior, studying interior design here really opened my mind with the process. Because uh, when I studied architecture in Brazil, that was my biggest challenge. It still is at some point. To form an initial idea in my head, a conceptual idea, a conceptual for the shape of the building, for the general design of the environment. To come up with this particular thing, that would you know, resonate all of the design and from which I could take ideas and work with. So when I came here, I got in contact with Jonathan, which is the, the professor of the second year, and he has this interesting way of dealing with interior design students, which is like, total respect. If we came up with an idea, he wouldn't judge it at first. He would go along with it even if he agreed or not. And he would give us reference, 'you should go look', oh, 'there is a project like this, that looks like your concept, you should look on it, or 'you should cross reference this place with this place', or 'you should read that'. So, that's a nice approach you know. When you have an idea even if it sounds at first a little superficial or not very strong. If you put on a research about that, you may come up with lots of other ideas that eventually will form a real concept. Something that you can actually come up with good stuff of.... So, what I'm trying to say is that studying here helped me to have this insight you know?

I need to respect my ideas and work with that through references, I can, I can work with references all the time. So, that's important to, you know, so you can keep in mind that you area unique professional and even if your idea, some people may not understand at first, you can make them understand by referencing other things and thinking about it on a different level with time. You know? Does that make sense?

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

it's helpful. It was helpful that uh, especially because it made me feel more secure about my ideas, and, uh, well I already explained that a little earlier, it's it is supportive in that sense s well. I mean, well, these are excellent professionals, uh, listening, to, to me, so. And, my ideas and what I think should be done with the environment, so their opinion is very

important to me to grow, you know because I don't know if it's like that with everybody, but sometimes, sometimes you think that everything's perfect. Or, you know, ok, this is a great idea so I'm gonna do this layout and I'm gonna use this and this lighting, when the tutor comes, it points, uh, he or she points uh, some bits of the project that are missing things that could get better.

Encouraging, I would have to say yes, but the reasons are, only what I said before you know. It's, it encourages us to be better. To be, uh, uh, always uh, looking and curious about our area, and inspiring because, for example, um, it's kind of uh, I take the tutors as kind of uh, role models or something you know?

And you know, they are well succeeded in the h, in the area as professionals, My tutor for example has done some amazing work in Australia. And he is full of knowledge about lots of things, and he's very uh, he's got a lot of culture, so is someone that inspires me in some level. Jonathan as well, uh, he is uh, he has an office and he always has an opinion that uh, makes me want to, you know, create that kind of knowledge in my head as well, so inspiring in that sense, you know, like they are role models, role models or something, you know.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I actually don't have a specific strategy. I generally, fuel myself with lots of references. I research on the internet, or different imagery that I see in magazines and stuff. I'm always paying attention to the environment that I'm at. I think, in travelling it really helps to see things and open your mind and, as it helps you at the moment that you have to work. But a strategy like one plus one equals two, no. That happens naturally I guess. I think that sometimes can be a problem, because when it comes to time management for example, I feel the need to have a method. Not a specific, like, not that I'm going to find that method on a book or anything, and just follow it, because I don't really think that exists. I think everyone is to create their own method, you know. And how to get there. I think I am already developing this method. But sometimes I feel the lack of it when especially in this time management thing. Especially when it comes to the date of the delivery and I'm all crazy about it and stressed because I have to deliver it, I think if I had planned better before or if I had organised myself, If I bad blab la bla, that would be, that wouldn't be happening right now. So, mainly my method nowadays is just researching a lot and you know, surround myself with ,uh, with uh, imagery and uh, other projects, fellow projects that relate to what I'm trying to work at right now to feel secure and move forward but about time management I, I have a gap there.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Well, they're pretty clear. Sometimes I have difficulty to understand, what the tutors really want. Then it comes to my mind that they don't want right away an answer, for the opinions that they are giving me on my project on my ideas, they want me to reflect on it. But, sometimes I blame it on English because it's not my mother language. You tend to have difficulty to process information and stuff.

The language that you were born speaking or something like this, you tend to have ore difficulty to process information and stuff.

And, well sometimes there is this gap of understanding, because, well, when the language is not your main language. The language that you were born speaking or something like this,

But it came to my mind that that's not the problem. The problem is that I always am a little bit of an anxious person. So I want to have fast answers and fast uh, uh, you know, uh responses for

What I am looking for at the moment and sometimes it takes time. You need to think about it and really uh, uh, digest what you must do before you can have your answer as a product.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Um, the main challenges facing. Well, I think the main challenge is the first step. Once I take the first step things tend to flow. When I have that click, you know. Oh, that's amazing, so and then I get to develop it. That's ok, but um, I'm not very good with brainstorming or, Conceptualising yes. It's something that I need time to think and think again. I, you know, as I said before, fill myself with references that's going to work you know, before I move forward. That's my main challenge. Sometimes I think I should take more chances, take more risks, but, you know, that's something we'll see in the future I guess.

What kind of um, suggestion or, solutions that you're trying to, to follow, to conceptualise the brief in aim of solving this issue?

What strategy am I taking? Well, first of all, I am not afraid of my silly ideas any more, you know. I am not afraid of not having this genius idea at first. I think that's a pretty good strategy. Respect your ideas.

Because it's like, I think creativity is kind of, it's a kind of um, stubborn woman. Because, uh, if you give her a lot of 'nos' she will be upset and she won't answer to you anymore. You know? Like uh,

I love your explanation! Stubborn woman ok!

You need to listen to her. You need to pay attention to what your creativity is telling you, because otherwise she will just shut the door in your face and no ideas will come any more.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Well I didn't really give much thought about it.

I knew that it would be good. And I think that's the thing that makes it right sometimes you know? When you just know something, and it's not that you can't research about it, but you have to have that uh, kind of a confidence that everything's gonna work.

12. How do you see yourself as an interior designer in the future?

Well succeeded hopefully, rich. [laughs] I want to work with, the thing that I like the most is working with house interior designs because that is the one that I get more pleasure on.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

It varies actually. But I would, I would have to say 70% of the times I would prefer to work solely, because I'll think that a project develops more smoothly and more quickly, but teamwork is important as well because it's that thing that I told about the tutors, (sorry) sometimes uh, sometimes people you are working with see stuff that you done and see stuff that you don't and have ideas that you didn't and that always adds up, you can always reflect on that and move forward. I mean, when you are, I think when you are a designer, I think when you are a good professional you have to know how to work in teams you know. You have, it's not that you're supposed to say yes to everything

You need to feel comfortable about the project and you need to feel comfortable about the ideas that are being applied to the project. So I'm not uncomfortable of asking why and how and saying like, ok, but this and this will not work, but this and this will work. I'm not so, uh, I'm not, you have to be comfortable with you're your groups ideas, but for you to be a good professional you need to learn how to listen to these ideas.

You need to listen how to, you know, uh, come up with something good. With references coming from all over the places you know?

14. Where do you prefer to work on your project? Studio or home or another place?

I prefer to work at home definitely. Because well, I prefer to work at home because I get to establish the mood of my work. I can put loud music if I want. I can stop the work anytime I want to. I don't know, have a certain catharsis, a moment, a moment catharsis like dancing, or um, going to the bathroom and looking, you know uh, [...] I can control my own Time.

My activity and when I am in the studio I need to be extremely focused and sometimes I need to have a way out in some level you know just to breathe and come back. But when I'm in the studio I'm not comfortable doing that because, you know, uh, well, it's first of all, it's a work environment, so imagine if I, out of the blue started dancing in the middle of the room. That doesn't exist. And sometimes I get, uh, I get a little anxious because, especially in the first days because I have the difficulty to conceptualise ideas, I get a little anxious because, you know, oh my god, all my friends have ideas already, I have nothing. So, that makes me a little uncomfortable. Yeah a little pressure. So, I think the studio environments aren't supposed to do that, but they do that in some level. It's good because well, you're gonna go through pressure your whole life, so it's good to learn how to deal with that. But if you're asking me where I'm more comfortable working I would have to say home.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I think about the concepts and I surround myself with imagery and things that would inspire me and give me ideas, I look for other projects and stuff. And then I try to think about elements of what I want. If it's shelving, if it's, I don't know cushions, if it's wall paper or whatever it is, or an element that I will do, I first think about the big picture that I want. I want to show the whole and then I think what I want to show, the little bits.

16. Are you confident sharing your ideas with your peers?

For example, I have a brainstorm and I come up with the big picture ideas, and if I keep that to myself, you will create this, it will be stuck, but if I show this to people, to friends, to my mother, to my teachers, I would see their, Response. I will gather a response to them. And that makes me think, ok that's something I can work with. Not necessarily what they say, but how they respond to what I am, not what I mean not necessarily what they say, I mean I'm not expecting them to give me solutions.

I expect them to, to give me opinions about what they think. Like 'oh, this is really interesting', or 'I would love to be in an environment like this', or 'how did you come up with this' or this is kind of dull, so through that, through opinions I get to see, ok, so this is the

idea that I like, but I don't think that it will go very far. Or, this is an idea that I like and I think will go very far. Or, this is an idea that I don't like, but it has a potential.

So, it's all about non-stop working.

17. Do like presenting your project in front of others?

I don't feel confident enough if I don't have enough references. Enough, enough ways to prove that that's a good idea. So, I only feel confident about an idea when I can, when I feel, when I have enough background to share them. To talk about it and to convince someone.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

This framing the idea. And gathering information related to the project, I love that. You know, uh, to, to really dive into the all types of references that I can, that makes me feel secure.

That makes me feel that I'm on the right track. That makes me feel that this is possible. This is applicable and this is gonna be amazing. Um, drawing sketches, I like. I like drawing and stuff. Uh, and I like to justify logically as well. Evaluating, choose the most suitable idea and justify it logically. Because, I don't, I love decorative elements and I love things that are just beautiful, but I love when they are beautiful and they are there for a reason as well, you know? Where they have a tangible function. When they are not there just to make things pretty. They are there to this function, it, it, sometimes you can't put, you can't put function on every little thing, but it's, it's nice to think that, of the use you know. How people will see this, how the circulation will happen, how, how, if it will be difficult, be hard for them to access that specific type of the room. What will they be feeling. It's nice to think of how the

environment, and how your project will be used by people. So, I think that's justifying it logically. And when you try to come up with a function to things, that also applies, you know you're concerned about your client, your concerned about whose using the product that you're coming up with. I think that's extremely necessary. You can just put yourself on a project and, ok that's fine. Which is a very hard transition to do. You know? To think with other, other people's heads and to think about other people's needs. It's something quite overwhelming sometimes you know. People are different. They have different needs. But, you can't be selfish. You can't be, you can't put your ego before the project. You know? You have to put the project and the people who will use that before your own needs and your own aesthetic vision, you know. Sometimes you can't, you need to understand that despite of the fact that you have a good taste, you can't put your good taste on everything, because well, that's just being selfish isn't it?

I love presenting the project, because, no, I like presenting the project specifically when I write everything that I want to say before, because otherwise I get a little bit confused on the presentation day. I like that presentation because, you know when you, you give an end to the end to a movie wraps up things in your head. And you feel like, OK, this work is done. And I can move forward to another one, you know. So that's a nice sensation. And generally is when I, I, I, because I never think the project's good enough. But when I present it I feel relief and I start to think, oh, but ok. That was good enough. It takes the weight off my back. You know, off a designer's back to deliver their project I think. Cause I think no-one that is a good designer thinks that the project's ever finished. It always can improve and change and when you wrap things up and just present, it's like you remove the weight off your back and you can finally appreciate your work. And go, Ok, this was nice, you know?

19. Do you prefer thinking of the holistic picture or the details?

I generally try to, I think about a general idea, idea that would tie everything up, and from there I pull the strings for the things that I want. So I start to think about the big picture to then think about the small picture.

20. Do you prefer to solve problems and find solutions through words or practically?

Words. I generally, I generally think about the problem, try to think about them rationally and come up with solutions in my head or writing about it you know. Ideas. And, ok, so, more space for these people to sit, so what can I do. I can have removable furnitures. I will write, removable furnitures. I can have, I can open a new space around, around the, the whatever, blab la. I write that. And then, and then after I have all these ideas then I go to the model making or to applying those ideas that I had to see if they work. To see if they really work, you know? So I, I'm not the person that, you know does the model and starts playing with it

and, oh, this would be good and then no. I need to think about it before I put to practice. I don't necessarily think that that's a good thing, but that's the thing that I do.

21. Do you prefer gathering lots of possibilities or deep facts?

I think that analysing in depth the basic information about it is gathering lots of information about the project. That's part of the reference that I was talking about earlier you know. I need to understand the space, I need to understand the logistics I need to understand the flow, I need to understand what I'm looking for, so the brief. That's reference. And I need to understand, that's a group of references that are there. Ok? I'll access it later. And then there's another group of references which is about the conceptual idea. I need to, I always, I need to, to reassure myself all the time and to, you know, make me believe that, you know, I have enough information and this will work, you know. So I think these two things are the same thing.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I feel like I am in a psycho, almost talking to a shrink, or psychological interview here, because I never even thought about these things.

I would have to say that, unfortunately I think, conventional and safe way.

Why unfortunately?

Well because, new way, sounds better than conventional way doesn't it? But it's interesting why you said new ways is better than old ways. Because new ways, well, new things always seem more appealing than conventional things you know. At least for me. I like to observe the people around me for example. So it calls more my attention when someone is dressed new than someone's dressed all conventional and, you know? It call more my attention when I get to an environment and it's something I've never seen in my life. Oh my god, how this person come up with this! Then when I came and thought, oh, ok, this is beautiful, this is nice, this works, but ok, I've seen this before.

23. Do you prefer to organise your work or to work free style?

Kind of yeah, I like to organise myself.

24. What is your motivation for your project? People or tasks?

What is my motivation in any project. Well basically, I think what motivates me the most is the thrill of creating, I think. Is, it's exciting, it's Inner self-motivated.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

Oh, that's so sad. Well, I listen to my educator. But I, I try to listen to what he has to say to me. But still, Keep it in some level you know? I don't just, discard it completely. I modify it in a way that we're both comfortable with.

26. How do you perceive criticism? Tactful or direct?

I will try to be soft and diplomatic as much as possible.

27. What is the social environment that encourages you to work in groups?

Active, music, dancing environment.

28. What do you like more: starting or finishing tasks?

Starting a project quite interesting

29. What is more important to you: being creative or being organised?

I like to connect the both things, you know? To, to connect a creative idea with function. That's the place that, that I want to get, you know? That's the place that I'm most satisfied with. When the creative ideas meet the functionality of the environment. That's when I think that this thing is a, it's a really nice work. When I get one, and I don't get the other. I always feel like, ok, there's something missing, there's something missing, I should do something different and bla bla bla.

But when I align those two things, that's an element, that that's fixed. I can work on something else but this is kind of like, this has to stay because this is beautiful, but it works for something else, it works as a functional and a nice thing for using, you know.

30. Do you prefer working following a structure or being spontaneous?

Ideally I would like to structure. A structured plan. But if I analyse my, my latest works, I would have to say that it's a bit messy.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Exciting environment. You know, music, and dancing. [laughs] I need to give my little steps when I'm working. I need to listen to some music and just go... [sings] I need that.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Stress me. turns me off

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Information, I think that will be the first one. Then inside that, this will come. Which is feelings and which is, but I need to base myself first, before. I think this goes hand in hand: intuition, feelings and hunches without trying to give creative ideas.

And after that, that will come like, values and benefits, possibility in my work. Cautions and difficulties. Cautions and difficulties, this will go first. There we go. But this is, I don't know. [laughs] This is something, this is my next step.

So why white, red, green, black, yellow and the blue is your next step.

Yes

Students code: Ji.C

Institution (3)

Date: 11th of December 2014.

1. Why did you choose to study interior design?

Because I had a sort of total life change and I wanted to do something different. It's something I've been interested in for a long time. Always, in fact I had a soft furnishings business years ago. Well, it's more curtains fabrics, wallpapers, that sort of thing.

I've done some houses up as well. Because my, because of my life change I decided I wanted to go and do some education. So, I decided that interior design would be a good one to do.

2. Why did you choose to study interior design in the UK (for international students)?

I don't live very far. Actually, originally I was going to go to Luton. I didn't realise they offered this in C. I wasn't happy about going to Luton for various reasons. So last minute I looked again and I realised that they did do it here. And here I am.

3. Why did you choose to study at (the name of the institution)?

Well, because it happened to offer the course that I wanted to do. Yeah.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Well, I've got many skills. My mother was a dressmaker, so I've always been around fabrics and things since I was a young child making things. I, for the most of my life I've done hairdressing, which again is something quite arty. [...] I've also sort of done houses up and things like that so I'm quite interested in changing designs of houses and improving them, so it's just it's um, it's just something that really fascinates me. It's something I love. I love anything to do with houses and interiors and, I suppose this course has broadened my, my spectrum slightly because obviously it's not, and I realise that interior design is not just about houses, which, unfortunately people do think that's what it is. But I do think that's my main interest and that's probably what I'll end up, you know.

6. How would you describe your experience studying interior design? Why?

My experience studying here. Actually it was a bit of a daunting experience initially because I haven't been in education for a number of years, although I was a trainer for our salon. So I have kept my qualifications up to date, so I suppose it was actually quite nerve racking for me to come, so my experience, actually it's probably been a positive one. Probably more positive than I thought. I suppose it's turned out as I hoped it would be. But, um yeah. So, yeah I would say it's a good experience.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

I don't like working in a studio. I find it very negative space, at home I've got my whole desk. I have a room the size of the garage that is my studio. And I feel more at ease working in my own space cause I've got everything where I want it to be. And this to me is not a comfortable environment for me to work in. I think because the studio is used by so many, because obviously it would be, it's, you know, I like my own personal space. And I do like to leave things. I mean at home I've got stuff everywhere and, obviously I cannot do that here so it's very limiting if I'm working here.

Being with tutors in the studio is a positive thing and that's obviously why I come to the studio. Because you get input. Although I sometimes feel that some, of the lectures can be a little, perhaps, neutral in their input, and I was discussing with somebody earlier, and it would be quite nice occasionally, particularly perhaps for me personally to have something positive with a, sort of a, 'you're going in the right direction but you could be pushing it further here',

rather than, it's a sort of 'but you need to be doing this, this and this', and I do find that's a little, it makes me question am I doing the right thing all the time. Which, I think I am doing the right thing, but I need backup really, I suppose, to confirm that I am.

The studio is encouraging, It can have a positive and negative effect. It can be positive in that yes I do perhaps explore things. But on the other hand it can push me in another direction that perhaps I really don't need to go when I've actually probably got everything there in front of me, I just need to resort it into a more reorganised way or explore things a little. So, I can find it can have a sort of positive and negative effect.

I find the studio actually inspiring when have perhaps more critiques, or when I come to the critiques with the other years I find that sort of, can point you in a different direction, or it can perhaps make you realise that, give you clarity with what you're doing.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Good mark. I suppose that's one of my reasons for coming back. Well, that actually isn't the only reason. I want to do well. And I've always throughout my life, if I'm gonna do something, I either give it all or don't do it.

Yeah. And, that's, so I suppose from that point of view, it's. but on the other hand I'm not totally driven by marks, I do, that was a discussion I had with Ti actually when I started the course. I was worried about, would I do well. And he said if you do the work, actually the marks come. And I think that's very true. I do agree with that. So yeah.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

No, I think I'm quite, quite clear. Another thing that perhaps my age has given me is the fact that I can be impartial about things and objective, rather than be, I think it's, I can look at something and it's like, it doesn't matter to me whether I like it or not. I'm aiming at, you know, I've got a brief, I'm aiming at the end project. And you know, personal things don't come into it. Yeah.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

I think one of the things, when I'm working in a pair is that we both have perhaps a different ethos, end goal, whatever. And that I struggle with. Although I think we'll resolve the issues and hopefully it will come to a positive conclusion. But I found that a little bit difficult I suppose.

What exactly difficulties? Is it communication or,

Yes, yeah. And I suppose, I dunno, perhaps it's an age factor, but I think being that they're younger, they look upon me not totally as a student, they look upon me perhaps as a, a mother figure, which I don't, I try to sort of get away from that. And I'm, I'm very enthusiastic and I can feel quite strong about my ideas. I think they perhaps feel a bit overawed with that. But I don't want them to, I just want to share my ideas and it's, I think that's, perhaps a bit of a problem. [...] One of them, I would say had a bit of an issue with that. But, you know, I think it's being resolved so.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

It's as I thought it would be yeah. There's been no surprises.

12. How do you see yourself as an interior designer in the future?

I'm not sure at the moment. I'd initially I did have an idea where I wanted to be. I don't have a business now, I don't want another business. I'd like to work for somebody I suppose, but I can see that the realism of that wouldn't happen. I'd probably end up working for myself. But I want to pursue the profession and enjoy it. I don't want it to become a vehicle that I've got to do to earn money. I want to go out there, cherry pick the jobs I do. So I'm doing something and I'm getting a lot of enjoyment from it, rather than actually um, I mean I suppose I'm lucky in fact, cause I have a business and an income, I don't have to go out there and get a high-end paid job. And if something was offered to me, I would go with it. So I'm actually keeping my options wide open.

And I'm gonna see what happens and see if I get offered anything and if I do then I'll go with it. And if I don't, well I don't know.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

On my own. Definitely.

14. Where do you prefer to work on your project? Studio or home or another place?

In my studio at home. Why? Because it's my space, it's catered to me and I just feel comfortable and I have to feel. I, it's very important to me to feel comfortable and right.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I suppose actually, if I forget about what goes on in here, I would, I would tend to um research. I always find that with anything I'm doing, whether I'm tiling the wall or whatever. It's looking for, looking for research in the stuff. Looking at what I really want. Getting the right look. So I suppose the look perhaps is somewhere in here already. If I'm, you know. And then, sort of moving it forward from there. So that's how I would sort of start is sort of, um computer research. Getting samples and things together. I'm a great one for trying things out and putting bits up and sticking them on walls and seeing what works together and what I like together and what I don't like together. So that's probably how I sort of work. It's sort of a logical way to me, but it's probably quite random to some.

16. Are you confident sharing your ideas with your peers?

Well I'm a great one for asking people. [laughs] [...] from my house was sort of, if I'm working on something, I'll sort of, 'oh, what do you think of this?' And I sort of, I suppose I listen to different people's input. My daughter's actually very, quite, quite critical of me. In a positive and negative way so she's actually a good one I do sort of ask her, her opinion. That's the way I sort of gauge whether I'm going in the right direction is by asking for different opinions from people. So I suppose it's, I'm so being in my own world, what everyone thinks, you know.

17. Do like presenting your project in front of others?

it depends on perhaps how happy I am with what I've perceived and come forward.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I enjoy it all. I can't be specific, I do enjoy the whole thing. Getting things together and making things work together. The only bit I struggle, I do struggle with the software part, but I think everyone does. But I, I actually I enjoy it. I can't say I don't enjoy any of it I do enjoy it all.

19. Do you prefer thinking of the holistic picture or the details?

Holistic, I think you've gotta look at it as a whole. You can't look at the thing, it's nice to get, I am a great one for attention to detail, but I think the attention to detail has to come after you've got the whole thing in mind because I think working on something individual can end up very out of balance and out of kilter with, with the rest of the project, so.

20. Do you prefer to solve problems and find solutions through words or practically?

All through my life it's been experience I tell you. [laughs] I do try and, you know, I think you need to be, you need to be ahead of your game or up with the game because otherwise you're never gonna succeed with everybody else. So from a commercial point of view I think you have to be cutting edge. Um, so, so yeah. I go with the, the, latest technologies yeah.

Cause you have to. Not because I enjoy using them but because I think you have to.

21. Do you prefer gathering lots of possibilities or deep facts?

Even if I've perhaps, if I've found something and I say 'yes I like this', I will still explore to see if there are any more options because um, it's very easy to get sort of transfixed on something and it can perhaps end up being the wrong thing. But having a broader spectrum actually makes you realise that you are focusing on the right, right thing. I do lots of research. In most things I do actually. Never used to but it's something over the years I've learned to do and I think it works quite well.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Oh, I tend to keep it safe at times, although I'm trying to take a risk.

23. Do you prefer to organise your work or to work free style?

I actually I do work quite well to deadlines. If I know I've got a deadline. If it was a long away deadline I'd probably sort of procrastinate for the first while and then when the deadlines getting nearer but I still mentally know I've got enough time to sort it, then I'll go hell for leather and get it done. That's me.

24. What is your motivation for your project? People or tasks?

I'm very self motivated. I suppose my take on working here on a project would be different to perhaps working outside on other projects. Because really, at the end of the day this is different to, to the sort of day at my degree, and but if I was working on a project outside of here my motivation would be trying to get it right for my client. And that would be paramount over everything. You know I would bend over backwards to make sure the client was happy because they're the ones paying the bill at the end of the day. So that would be my motivation. But my motivation here is for my degree.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I think, the most important thing is I've got to feel happy with what I've done. So I think it's me first. And hopefully it falls in with what they're expecting me to do.

I think it would have to be my own satisfaction, but obviously, yeah.

Mainly both but honestly cause that's. it's a balance isn't it. I need the input to move forward but then I've got to feel happy with what I'm producing cause I'm not producing, well I am producing it for them but I'm also producing it for me. Some of the bits of work I've printed off, some students, well they say well that's alright, I'll just hand it in as it is, but I'm not happy with it, it's not up to my standard, so therefore I want to get it to my standard to hand in. but one of the criticisms I've always had throughout my working life, cause I've trained hairdressers and stuff, is I train them to too high a standard.

26. How do you perceive criticism? Tactful or direct?

Disappointing

27. What is the social environment that encourages you to work in groups?

Mature people.

28. What do you like more: starting or finishing tasks?

Finishing definitely.

29. What is more important to you: being creative or being organised?

Um that's an eco sort of thing isn't it really. Um, I think, I think it would have to be, one would come with the other. I don't think you could actually differentiate between them because both are vitally important, depending on what you're working on. But you couldn't, whatever you do creatively it has to be within certain bounds unfortunately. So,

30. Do you prefer working following a structure or being spontaneous?

Unfortunately we have to follow plans. I do, I think I prefer to work without total convention, but, but, yeah unfortunately you do have to come to structured plans in the end don't you, whatever you're doing. I prefer working without, but I do realise you have to have a structure.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I like quiet. Yeah. I need to have quietness to actually be able to think.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

It can do both actually. I work to a deadline, but I also, if someone gave me a deadline I'd still work, it'd be my deadline, although I'd still get it in on the deadline if you see what I mean, so I would, I would adjust the deadline to suit me in my life.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Because when I start something I'd like to think of myself as being quite sort of intuitive and spiritual and so on. And it has to feel right. If it doesn't feel right, so that's that one. Then I would perhaps put my sensible head on, after I've, then I think, well, ok, is this gonna actually work in that situation? Is there gonna be any value or benefit from actually doing it? Is it going to improve things? Um, so that would be the next thing. I suppose, yeah, then I'd need to actually inform myself about the process. So that'd be my, my, my um you know when you look up the information and research that's be my research. And then I'd need to sort through the thinking. Sort through it, so I'd need to sort of um, look at it an, and, perhaps adjust. Then I might have to come up with some alternative solutions because perhaps my original ones might be perhaps not cost effective or whatever. And then, I suppose last and not least I do think about things if they might go wrong, but I don't tend to. I'm quite a positive person not a negative person. So I just tend to [laughs]

Ok. So it, you put them in the beginning as red, yellow white, blue, green, black, but then you thought it should be red, yellow, green white blue black. Right?

Yes.

Thank you so much

Students code: Lu.C

Institution (3)

Date: December 2014

A) Supplementary questions:

1. Why did you choose to study interior design?

Well, I'm from a fine art background. I did a degree in fine art, but it's a very broad subject and I was looking into different ways of applying my work and I started looking into interior design and I thought it's a lot more of a structured way of looking at, or applying the craft that you wanna do. I dunno, I found it a lot more structured, I thought there's a lot more career paths with it. It's not a very vague subject, there's a lot of different trades and jobs that you can go into after interior design.

So can you describe how you see interior design?

Well I see it differently to how I first thought, since starting the course. Interior design can be in anything, it can be sculptural, can be retail based, theatre based, television based, window dressing, lighting design. There's a lot of there's a lot of jobs that you can get off interior design I think.

I did two and a half years. I left, I didn't, I didn't finish the course because I was, well, there were personal issues on top but, [pauses] I lost interest into the second year cause I felt like it was very vague. I didn't feel like it was structured. It felt like, you see your tutors like every two weeks cause there was like two hundred students on the course. It was very, it wasn't very helpful to finding out, I didn't know what I wanted to do after it. It wasn't giving me any kind of thoughts of to where this could take me.

2. Why did you choose to study interior design in the UK (for international students)?

British

3. Why did you choose to study at (the name of the institution)?

I had a look at different courses around the UK. I wanted to move to C. any way because I think that the, the whole environment of C. is a lot more relaxed, I think you can study a lot better here. But looking at the structure of the course and coming to open days I felt like this was very, the time management, the way that you're given individual mini projects each week, and they all connect for your final project. I thought that was like the best way of learning and it has proved to be. I feel like I've learned more in these two years than I have done in a long time. Like I'm constantly taking in and its sticking with me. It's sinking in I'm

not just getting the information and it's just cause my brain sometimes has a tendency to 'in one ear and out'. But with this course it's yeah. It sunk in really well.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Well skills I would say that I do amateur photography. I've done a bit of sculpture. I used to do painting. And like do mixed media and installations and stuff and it's nice that you can apply that through interior designs, modelling and just like, the first concept stages I think that's the most interesting part for me, the actual initial birth of an idea.

6. How would you describe your experience studying interior design? Why?

Really good I feel like I've learnt a lot about different periods in interior design. The way that I look at buildings, even when I'm just out and about. Inside I'm constantly thinking, 'where was the concept for this, where was the thought process for this'. You fine tune things I've found with interior design and it comes into play with quite a lot of skills in your life. I think you look around and you can find it everywhere. There's design in everything and it's not something I've ever picked up on before starting this course, which is interesting.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yeah, the studio's good. The studio's really good for looking at other people's work. Seeing the different stages that people are at and getting a lot of, because of how small our group is as well it's nice that you get a lot of peer feedback. You get a lot of crits. Your tutors are there, like, you know. You can email my tutor and see him within half an hour with any problems you've got. I find that really good.

Not just in the studio, like throughout the university. Quite supportive with other things, not just, you know they can be supportive with outside, you know personal things that you've got going on in your life and you know financial situations. There's a lot of different elements where I've found it quite a supportive course. Yeah, it definitely gives you drive. What's nice is, when you have a crit is not just painting over the cracks and saying 'oh, yeah, that's really good', you know you're constantly getting constructive criticism you're constantly, and it took a while for me to not take it as a knock back and I used to be quite defensive about my work even if I didn't feel confident about myself and when I used to get crits and feedback I used to take it as a know. But I've not, I've started to realise this I only to improve my work. This is only to. You know. Make me grow rather than going, o well they don't like my design and

that's because, well, you know nothing's ever finalised, nothing's ever finished. And I think that's one of the main things that I've learnt here. And knowing that's helped me grow and helped me push myself further cause I'm always looking at, well, you know, what could this be? Could this be something else.

Really, really inspiring yeah. Not just being in C. but, the tutors that you've got. The environment of the studio. The material that we're told to look up with regards to books and stuff you know. Walking round you get, constantly all the time thinking about work you know. Where can I push my ideas? What can I be doing and stuff. Which is, yeah. The most, the most I've been inspired on any course or any kind of think that I've done in my life before I would say.]

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

[laughs] that's something that I'm still too conquer. I have a tendency to do loads of research and get loads of images and loads of stuff together, but I never start applying pen to paper until later on which I really need to change. Because I give myself two three weeks before the hand in and it's just like twenty four hours, twelve hours, just straight doing it. But I've noticed that I do work a lot better under pressure. I don't work well when I've got a big time to fill. I end up, I end up just not, just kind of meandering and doing other things and thinking, 'oh well I've got so long to do it', whereas I think if I was given a, I'm not saying I'm requesting a smaller timescale, but I think I always end up really showing the abilities that I've got in the last like, three weeks four weeks tops. That's when I start really pushing myself. I need to change that.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

No I think the way that this course is structured and especially with those booklets. They're so handy. And week by week you get told, you know, it's not very vague, like 'ok, we're going to be looking at colour, or were going to be looking at texture, these are the kinds of things we're going to be looking at', and it gives you, I think It's spelled out really easily I think it's spelled out really clear. They don't try and overcomplicate things. They don't try and make it too fancy. I think it's very easy to read the projects, yeah.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Time. Time management again, cause I end up wasting I waste a couple of weeks just like, thinking and then I let the

No, I'm constantly doing work, but I, I, have a tendency to stay at the concept and the design stage of what could it be. Could it be this and like, I keep myself there for quite a long time rather than getting something nailed in the first like week or so and then progressing onto 'how will this actually work'. Materials and stuff. Cause that is always something that's put on the backburner. But again I think that's just because of the skills, I'm not as confident at like the building materials, or the digital media, so I will stay where I'm most comfortable with the fine art bit with all the, you know, the model making and the stuff, I tend to stick around that area. Which I need to change because what I should be more focusing on is my digital and my building.

Why you feel you need to change?

Cause everything's digital. Nothing's really, like if I could handle, I'm so much more comfortable hand drawing all my floor plans and my elevations and stuff, but everything's digital now. I think to get a job, or to get a career going I think I need to be a lot quicker at my technical stuff.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Oh, no. it's so much different. It's not so, it's not massively different it's, it's a lot more technical than I thought it was gonna be. But that's but it's, but it's also a lot more creative. D'you know what, to be honest I don't really know what I was expecting. But what I have experienced here has been so much better than what I thought it was gonna be.

Really?

Yeah, I've learnt so much. I've learnt much and learnt so many skills and I know how to look up stuff I know how to look into things but I feel like I've got a set of skills now, whereas before I didn't and it was a really thing coming from like a fine art background. I was, I didn't think I'd be able to like, do well at this course, and then, you know hit first and everything, and so, I'm getting it, and it's exciting. The encouragement. They get through. It makes you wanna push yourself. Because you're seeing them quite regularly so you wanna show them like, 'oh, you know this is where I've listened to what you've said, I've pushed myself' and I think that's a really good thing.

How you define creative or creativity?

I don't think there is a way, it's a, I think it's [pauses] how you look at things. I think it's like, some people look at a table and it's a table. Or some people look at a table and think it's a

piece of wood with a bit of metal at the bottom, what else could that be? I think that could be an element of creativity.

12. How do you see yourself as an interior designer in the future?

Well, when I first started this course I wanted to go into theatre, stage design. Um, like, building sets and all that kind of stuff or TV design, but after doing, after being here I feel like I don't know. I don't know I think it's kind of changed. I'm not too sure whether I'd like to do residential as opposed to theatre design. Because I don't know whether I'd be able to keep up with the pace of what a theatre designer does. I didn't realise how many, how much, decisions and how many different ways that you've got to look at stuff. Whereas I think residential is a lot more structured it's got like, you know, your concept your plan, your du du du du du du.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

On my own, up until about a week ago, until I started gelling with one of the groups on design for the screen .and now I feel like I'm learning quite a bit off the other students, which before I was getting quite ratty and I quite like working an it's the first time that I've worked in groups. So I don't know now. If it was a week ago, I literally would have said on my own, but now I'm not so sure.

14. Where do you prefer to work on your project? Studio or home or another place?

At home. I find in the studio I don't know what it is, but I tend to do less, a lot less here than I do at home in my own, like, office thing.

So you just sit on your office.

Yeah, yeah, yeah. Lock my door away. [laughs] My brain's all over the wall and stuff, so.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Really quick sketches, or if I've got a I thought of an idea like, say, I don't know, just a certain concept then I do loads of research on the computer as to what this concept could be or what else it could mean or how it interacts with the human. Just yeah.

16. Are you confident sharing your ideas with your peers?

Yeah. I don't mind showing my work.

17. Do like presenting your project in front of others?

What I have a problem with is speaking about it. Like, if I've got a crit or something I'll have specific bullet points that I'll need to say with it. But if someone asks me a question then I tend to waffle, I'm not able, I find it hard to pin point what I'm trying to get across. Like, it's perfectly clear in my head but what comes out, sometimes goes off on a tangent.

18. Which is the most interesting part in the project for you:
- a. Thinking of the conceptual idea.
 - b. Writ a list of the projects' tasks, boundaries, and problems.
 - c. Researching of information related to your project.
 - d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
 - e. Drawing sketches of your ideas.
 - f. Evaluate and criticised idea, and justify it logically.
 - g. Start hand drawing (plan, perspective, and furniture).
 - h. Working on computer software CAD
 - i. Prepare the final poster, model, power point show
 - j. Presenting your project and talk about it and explain it verbally.

The conceptual idea. And the, the drawing sketches for your ideas. I would say framing a conceptual idea would be the top one. Just because, I think that's the most fun. I think that's where you can really let yourself go and really think about you know, pushing stuff and pushing boundaries.

19. Do you prefer thinking of the holistic picture or the details?

Working on the details. And that's a problem sometimes because I do tend to focus on the little rather than the case in itself.

20. Do you prefer to solve problems and find solutions through words or practically?

I'd say practically yeah, I'd definitely say practically. Testing and breaking and all that kind of stuff yeah.

21. Do you prefer gathering lots of possibilities or deep facts?

I think that depends on which project you'd be doing. Because sometimes you would do that and then other times you would do that. I do tend to gather quite a lot of information and get a lot of, backdated. But also if I get a specific question or like 'this is your concept' then I like

going like, I suppose they could both be a lot of information cause analysing in depth could be a lot of information in a different way.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Take a risk. Definitely take a risk but then, I always have a problem of how it would actually work in reality. But yeah. I like being flamboyant with my ideas. [laughs]

Older experienced technology definitely. I don't know why digital sort of just, freaks me out a bit. I think because [laughs] I don't know.

23. Do you prefer to organise your work or to work free style?

Not rigid structure, but following steps.

24. What is your motivation for your project? People or tasks?

I suppose how right the project could be. How deep it can be with regards to, I would never get a project and go, 'ok, design a shop, ok it's a flower shop, here are some flowers.' Like, I don't want it to be really, I get excited like, when you see how deep it can go and you stop thinking so literally and you come more and more abstract and then you use light instead of pictures, you use sound instead of words like, do you know what I mean?

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

Um, sometimes educators appreciation, because I really value what they think is good because they don't, they would never sit there and go that's good design if they honestly didn't think it was. So I do value theirs because I can obviously be more biased to my projects and thoughts, whereas they're a third party, they've not got an emotional attachment. So I would say educators definitely. I think that pushes you more. I think once, if I thought that my project was really good and it was done, then I wouldn't do any more with it. I would stop. Whereas, you know my tutor comes in and scribbles it all out and goes, oh, try it again and it pushes you to wanna do better I suppose.

26. How do you perceive criticism? Tactful or direct?

Tactful, but I appreciate useful feedback.

27. What is the social environment that encourages you to work in groups?

Friendly, exciting, playful environment.

28. What do you like more: starting or finishing tasks?

Both, I have passion in the start and motivated to finish and see the project finishing.

29. What is more important to you: being creative or being organised?

The creative standard of the idea, I guess. I just think you've gotta be passionate about what you're doing. Passionate about how much you've pushed yourself into what this could be rather than squash your ideas or squash your thoughts because of the surroundings that you've been given.

30. Do you prefer working following a structure or being spontaneous?

Structured plan. Definitely definitely. Not like structured plan like, ok you need to have this done by this. But like, the books that we get and we're given each week. Ok, so you could be looking at this now you could be looking at this. I like having some form of backbone or structure that I can be working on. Cause again, going back to the course that I did at Liverpool we was given nothing. We was given like, ok, choose your own project. I'll see you in six weeks. And it's like, so vague and It's like there's so many things that you could do it's nice to be able to compress it I think.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Exciting, active environment, maybe. Cause I think it gives you more. I think you can do more, I think, I like scale and big things. [laughs]

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I think half way through a deadline I have about a week or two where I get really stressed out and I feel like the world's completely piled on top of me and I can't do it. And then I get past that and that's when I push through yeah. [laughs] I have like three stages. I have the initial stage where I do loads of research on the concept bit. Then I have a week or two thinking, oh, I've left too much behind and stress or whatever. And the last four, five weeks usually, I'm ok then. I don't know why. But that's how it works.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

So, red, green ,blue, white, yellow, black.

So, concept, playing with what the concept could be. Pushing it, seeing what else it could be. Still working out, well, sketches and thinking and doing little models and stuff. More

research. Working out how, if this could be actually made into a reality and then panic about the things that might go wrong at the end. [laughs]

Students code: Ma.C

Institution (3)

Date: 11 December 2014

A) Supplementary questions:

1. Why did you choose to study interior design?

I wanted to study interior design since I was little, I guess nine maybe was when I decided would be interior design. My parents kind of um, do this thing, they do a lot of furniture, a lot of materials. Since I was little I was always around them so. And I loved drawing, so I always knew that it would be something in between.

Then I decided that interior design is actually the thing that combines all kind of arts. All kind of design, whatever you want, it's all in interior design. So yeah, I decided that I wanna do that. [laughs]

2. Why did you choose to study interior design in the UK (for international students)?

I'm from Bulgaria. So, I was studying in an English medium school and, I decided that I wanna study in a country that can teach me English so I can understand it. I wanted to be out of my home country because interior design there is not that developed. So, yes.

In Bulgaria, I just wanted to go outside to see different things. I love travelling as well, so I always wanted to go somewhere else. Be among other people, different cultures and stuff. And I think as an interior designer it's very important for you to have this knowledge of other cultures. So yeah, pretty much that. When I started looking at universities I decided that UK is maybe the most appropriate place I can go to. Although it was very expensive, it is still, but yes.

3. Why did you choose to study at (the name of the institution)?

Um, it wasn't my first choice, but as I have five, right, five, I can choose between five universities that I can apply for. Anglia Ruskin was one of them because I really like their, their, there are tables you can look at with, with, how is it called in English I don't actually know. You know those kind of graphic tables and stuff. So Anglia Ruskin was very good at this one, so I thought that I can try and at many universities they want you to have a

foundation year before that, which was, I didn't want to lose one year anyway, so Anglia Ruskin didn't want that. I decided, whatever, I'll apply, and they were the first university to accept me. And then, I don't know, I just thought like I wanna go there. After that they accept me at the other schools as well, but I already have that feeling about C School for Art [laughs] I'm a bit crazy about these things. When I feel something, when I, you know, bit weird but yes. I trusted my inner Feeling

Yes, when you know, well, different websites when you know prospective students how they graduate, how easy they find jobs.

4. Which year are you in?

Second year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Well, I love drawing as I've already said. I think I'm pretty good at sketching and stuff like that. When I talk and I want to explain something, apart from using a lot of gestures, I really feel comfortable when drawing in a perspective thing so that I can show people. Other than designs and stuff I really enjoy CAD and I, I feel comfortable using computer programmes and stuff. I don't find it so confusing or complicated. Some things just need practice and time. And I really enjoy working with materials and stuff. Like mainly soft materials mainly because that's what my parents were doing so, kind of familiar with it. I wanted to actually don't know what's that drive me to interior design. History of Art as well which is very interesting for me. The whole periods going from one to another and then going back and the whole circle of it and it's pretty exciting. Cause I do like fashion as well, a lot, but, but you can't notice in the studio cause we're all working but I'm very much into this and so I find it as well in interior design the whole materials and, yeah. Cause when you study interior design you also study about people. About action reaction, everything how it's happening how movement of a person inside of a space. So you kind of have to know everything. And I like that, knowing everything. [laughs] So, I'm sorry.

6. How would you describe your experience studying interior design? Why?

I find it very, very, very exciting. The first thing that I find, or that I felt most enthusiastic about was that everything is practical. Cause in Bulgaria you have a lot of, all the time, they give you a lot of information and students there are really smart because they have so much given to them, but there is, most of the places you don't have much of a practical work. And that's what I liked here that you learn everything and you're in the process while you are, as a, for example, when I'm doing a project and I'm working on something they don't come and

give me all the information I need because they can't. They don't know what I will be needing. So the good thing is that I'm here. I'm doing something, and when I need to know what I need so I can go forward, I can go find it or I can always go in the library, talk to my tutors, teachers, lecturers and I can, I can on. It's not, you don't have to be bothered with all the information at this point cause you get confused. Well, I get confused at least, and it's much easier having what you need right, at the right time. If you can understand me, yes. So. Yeah. Pretty much I think it's, that's what I like most. And so there are some problems, I mean, some, some small thing that are not thought enough.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes it is helpful I think it's very helpful cause we're all, all in the same room, we can cooperate, we can, we can always talk, look for other people's opinion, and it's, it is, it is helpful. You can always see other students' work. You can, and everything there, they're providing most of what we need here.

Well, helpful and supportive for me is, yeah. They support me. If I need something I know I can always turn to them. Especially Tim.

I think they are encouraging in a way of when they show you the other people's work you know who graduated and stuff like that. And when we have those design benches we have designers come and we get, we have this thing that oh my god, I wanna be that person one day you know? But in the same time I think where I came from you have a lot of pressure during studying and it's sometimes good to have more pressure and here you're just free. Free as a bird you can do what every want, whatever you want, no-one's gonna yell at you or give you bad grades and stuff like that. It's just sometimes needs a little bit of someone to push you but not like, do you wanna be pushed, but like, pushed. [laughs] You know? Asking me sometimes but, uh.

My inspiration is um, it's pretty tough, I don't know. I guess I'm an artist. I get inspired from different things. I can get inspired watching a movie or I can, sometime I get inspired from dreams and stuff like that, but I can get inspired from a picture or a drawing or just a line or, I don't know. Yeah. I love nature. I get inspired a lot by the nature. Yeah. And I love movies. Which is why I did design for the screen. Which is another good thing about studying here cause you can choose your modules. Like in this year we can choose from business, design for the screen and stuff like that. Which is another point of showing that interior design is connected to a lot more things than you just, you'd think. Cause most people think that interior design is decorating. Which is so not. [laughs] It's mainly, it's one little part of it, so one interior design is so much more.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

How do you manage your time through each project? Who, oh my god. [laughs] I, I um, as an international student I hand in earlier every year because I wanna go home for Christmas. And I have like, a month less than other students have and yeah, last year was a bit hard for the first semester cause you're just getting used to it and, well it's the end, but I managed to do it. Um, yeah. In the second semester was more, was much better because I already knew what's expected from me. Not confused. I already know how everything was going during the first semester you're still learning. So in the second semester I have A's it was perfect.

And, yeah, this year I'm working to places, and I don't have a day off at all and it's so much harder than last year and we have to do more, more projects and more double. So yes. And it's, sometimes I just, you just, when you're tired and you can't get inspired, and when you're not inspired you can't work in your projects or go forward and you stress and you feel like ah! But I, I'm one of those people that when I get, um, at some point I can do work for one night. I've done work for a week you know? And I am not, um, I can manage my time, I do, between the two works coming to uni and doing all my stuff, and I manage it good. But, and in the same time I'm helping here as an ambassador sometimes, I'm course rep and we're organising a design society. There are so many things. [laughs]

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

[...] they're pretty clear. They're sometimes, because my English is not my native language, that's when I get confused sometimes, when you know a whole sentence and there is just one word you don't understand, and it's [laughs] whole sentence have no meaning. But that's good part cause you always can, you can always ask.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Well I don't know. It's maybe for most of us it is the time, but I know that at some point when you get out and working you have a certain amount of time you can design whatever. So I don't think it's an issue it's just something you have to, have to have in mind. It doesn't depend on anyone and at some point if you think about it, in the second semester you have so much time, you have like twelve weeks to do something, which is quite a lot of time. If you're not doing anything else, I mean, if I'm doing, cause now it feels too much because I'm working and I'm studying, but if you think, I'll be, that's what I chose interior design cause I wanna do my work, so not feel like work. I want to turn my whole being to work, you know,

so every day you're going, you're doing something you love. And you don't feel like, oh, my god it's Monday I have to go to work. You feel oh yay! It's Monday finally! You know.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

well, I didn't know what to expect actually, cause I'm from a different country. I didn't know what the system was here. So,

You didn't have a look on the website or the modules or the programme before?

Well, choosing my universities, I went through so, so, so many and so much, and I was like, at some point I just didn't want to. I had that feeling and I decided that I'll just go there and whatever it is, it is. So, most of the times you know, you look at the website and they give you some amazing pictures. Student working doing stuff and when you go there it's completely different. [laughs] So yes, so I decided there is no point of me doing that. And um, so yeah.

12. How do you see yourself as an interior designer in the future?

I don't know. I want to, as I said I wanna do commercial projects. I wanna work hotels shops restaurants and my, first of all my idea years ago was I'll come here, I'll study here and I'll work here, and probably I will live here. Cause the situation in Bulgaria is not very good but now my plans kind of changed.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I don't mind both ways. I have a bit of a problem with, I'm sometimes kind of bossy. I realise that I know it, it's, I'm just, it, it's not that I think my ideas are always the best. Not like that. I can work with other people's ideas. For me, teamwork is like, you can actually steal someone else's idea without stealing it. You know?? Cause you're a team. There is, oh, that's a brilliant idea, but if you're working on your own, you can't take it. I can't take, but I don't feel comfortable in taking someone else's idea. But when you're a team you're, that idea is over to you, or, I mean, like you can develop it without feeling that it's not right, it's not mine, I've stolen it or something like that. And working in teams is also good because there might be skills you don't have, you can. And it depends, it always depends on the team.

Yes. But I've, I've always found a way to cooperate with people. Yes. Well, yeah. I'm, no, no, no. I am very good at that, but they might not feel very, if I don't, lets say that if I don't like the people I'm working with. It becomes them and me. Because I don't like them and I don't,

and if I don't like their ideas and stuff I won't, I won't accept them telling me stuff and giving them ideas over mine. And if they're not happy with that, you know. So yes, but I don't mind working on a team I like it. Yeah. I don't enjoy working in a team with my colleagues now.

Three different teams and the three projects are going very well. And the best thing is that sometimes you're working, working, working and every good, someone else come and look to your work and give you their opinion. That's what I like about presentations and stuff. That you can always show your work at an early stage and you can get more ideas from people. I don't want them just to be good, I want them to see what they are, say what they are seeing. Cause sometimes you are so focused on something you don't see it right. And that's a good, when you work in a team, when you're doing something they see something different that you can work with, which is very good.

14. Where do you prefer to work on your project? Studio or home or another place?

I like it that way, working in the studio and at the same time at home. I work at home most of the things, and when you come here you just, you have the time to speak to the tutors and stuff. And

About equipment and stuff.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I don't actually know. If it's a place, I go there, take pictures, have a look at the place, decide what I want from the place. Then when I know what I want from the place I go to my client. See what's the purpose of the place. The proper materials I'm gonna use and I get the whole idea of it, and then I can start looking at other places like this. So I can, yeah, and I then get with the concept and then I start the sketching and everything. So pretty much just like that. I'm just putting everything I have. Combining different combinations. Deciding which can work and which can not. Most of the times you have a couple ideas of the same thing and then you just see which will work best for your concept. So it's pretty much that. Which one you feel more comfortable with. Which one will, your client will feel more comfortable with.

16. Are you confident sharing your ideas with your peers?

No. not at all. [laughs] Even though, even if you have a bad idea, it's not a bad idea. At the beginning especially it's always yes

17. Do like presenting your project in front of others?

No, it's never no.

18. Which is the most interesting part in the project for you:
- a. Thinking of the conceptual idea.
 - b. Writ a list of the projects' tasks, boundaries, and problems.
 - c. Researching of information related to your project.
 - d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
 - e. Drawing sketches of your ideas.
 - f. Evaluate and criticised idea, and justify it logically.
 - g. Start hand drawing (plan, perspective, and furniture).
 - h. Working on computer software CAD
 - i. Prepare the final poster, model, power point show
 - j. Presenting your project and talk about it and explain it verbally.

Framing the conceptual idea, identifying the project task [...]

Do I have to choose on one?

I wanna choose them all. It's the whole, you can't, it's not, how can I say, it's not possible to miss one, In my opinion. You can't miss any of these. Maybe the computer software. You can miss it. I wouldn't. but there are people that don't like working with computers. They don't feel comfortable in, with it, and there are clients that would prefer to see hand drawings and sketches and stuff like that than computer drawings, these steps actually accelerise the whole Process they're all interesting in their own way. You can't, I find something in all of them. Everything, the conceptual idea definitely, can't go without the concept. The task, the boundaries, the information that's the very interesting part when you get all the information. Thinking about solutions, drawing sketches I'm doing that from the very beginning. [laughs] Hand drawing. It's everything.

19. Do you prefer thinking of the holistic picture or the details?

I'm still learning about that, cause, you' when, at the beginning, well, I've always started with the details, the little things inside, the decoration stuff, but I realised that at some point you don't have the time to think about those little things now. Just have to get to the big picture down, down, down, down.

That's what I'm doing now. I'm getting form the big picture the whole idea and then I'm going down.

20. Do you prefer to solve problems and find solutions through words or practically?

Both. I, I prefer both. You kind of connect, they're kind of connected, you can't do one without the other. For me I need to see it, I need to touch it, but at the same time I need to hear about it, gather information.

21. Do you prefer gathering lots of possibilities or deep facts?

Do you prefer gathering lots of information [...] yes I kind of do, not a lot, but I don't ever measure the information I get. I just go and what I need I find it. It's like that. I don't, yeah it's not like oh my god, that's too much I have to stop looking, never.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I don't know. My last design project was a bit risky, but in the same time when you get inside it feels like a normal restaurant with just a good idea and a good design.

23. Do you prefer to organise your work or to work free style?

I, I like using everything. Whatever is there to use. Technology, not that new, old, whatever. I am Flexible.

24. What is your motivation for your project? People or tasks?

It's like inspiration. I can't, I don't have something to,

My inner depends on my, on what's happening around me, so, if I'm happy I'm motivated. If there are things making me happy I'll be around me I'll be happy which will motivate me.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

No I won't. I never change my, if I like them giving me opinion about if it's possible or impossible. If it's working. And if they, they try to, they will try to convince me to change it, but if I don't believe them, I won't. I will try another way of doing what I've already done but I very, very rarely do that. Changing stuff because someone else doesn't like. I, I make them in a way that they will.

Like it?

Yes. So, it's still mine, but in a different way. Ok?

26. How do you perceive criticism? Tactful or direct?

I can take it and give direct.

27. What is the social environment that encourages you to work in groups?

Harmony environment

28. What do you like more: starting or finishing tasks?

Finishing

29. What is more important to you: being creative or being organised?

Both. I mean, it has to work. That's the main idea but in a different, work, work creatively.

Work creatively. How do you define creativity?

Creativity. I don't know. It's different for everyone. For me creative thing is something that you always see or start, you have an idea of something but you see it in a different way. It takes something, someone very creative to change something no one ever changed like, you give, you have a spoon, and everyone's using a spoon they know how a spoon lie, they have their idea of spoon, but someone cones and change that. It's still a spoon but in a different way.

30. Do you prefer working following a structure or being spontaneous?

Sometimes. You always have this plan in your head that how it's going to work. What you have to get at the end, but depends. Depends how you feel.

So for example, you say, this week I will be working on this next week I will be.

Well you always try. You always try at the beginning but at some point it doesn't work like that.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I don't mind both way. It depends on what my project is, how I feel, what I want, if I want be around people if I look around or if I need to be with my thoughts.

It always depends.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

It doesn't stress me. Well since the beginning you know what time you have. If it's enough for you then It's enough for, well, if it was enough for someone else. Why wouldn't be enough for me. You know? So it shouldn't, it's my fault if it stress me if I don't have enough time, probably my fault.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

So, I manage the thinking process. Information available when needed. Well, that's not, that would be somewhere in the middle, alternatives and creative ideas, creative ideas, values and benefits what if something might work. When you already have your ideas, that's when I do if it's going to work or not. And if it's not I'm gonna make it work. Difficult, where things might go wrong. Well, they go like that, yeah, maybe something like that I guess. And this one goes with all of them.

Ok. So, if we say that the red hat will be with all the steps from the beginning to the end in your project. Then if we can say that red, blue, white, green then yellow and black together.

Yes.

Ok. Great. Thank you so much

Third Year students

Students code: An.C

Institution (3)

Date: December 2014.

Supplementary questions:

1. Why did you choose to study interior design?

I chose to study interior design because I was always passionate about interior design, since I was small. So, when I was in secondary school I had a personal teacher who was teaching me about how to draw and about the colour, ergonomics and the things which are related to interior design. And, and which led me to study, continue studying interior design.

2. Why you choose to study interior design in the UK?

Yes. I chose to study interior design in the UK, specifically here in C., because I, while I was doing research I was, I found out that C. is very deep in history and I was inspired by the gothic architecture of C. And, for me, the environment and the place is important. C. is a very quiet and peaceful place. That's why I wanted to study here. And a lot of things are

happening in London in design industry. So, a lot of exhibitions, competitions, so I thought that has more opportunities than the other countries.

So, because of C. as a city and because of being close to London as an international place that's really strongly related to design.

Yes.

3. Why did you choose to study at (the name of the institution)?

As an institution for art teaching interior design, is that mean something specifically for you? I mean, C. School of Art, because it's more creative and the tutors were close to you and also the, I heard that the art courses at Anglia Ruskin is good and so I wanted to study here.

You just said creative. What do you mean by creative?

I think it has a very broad definition. It's hard to say in a few words. I guess I think creativity is about thinking outside of the box, and thinking from different perspectives and using your lateral and vertical thinking.

4. Which year are you in?

Third

5. What kind of skills or interests do you have that drives you to study interior design?

I used to, I used to draw and I used to sketch a lot. And I was also interested in Fashion design because I feel like I have a good taste in fashion design as well. I like in colour and different fabric and textures and like, how it works well together, so, also I thought it relates to interior design

6. How would you describe your experience studying interior design? Why?

I, I like this course because I used to study in Mongolia as well in interior design and the educational system is completely different than here. We had almost eight courses per semester and, and it, we, it was very intense and we were like, it was very functional, like they would say, do this, this, this, this, and like it was very refined. But here it is more open and it's more about your self study. You can improve yourself. It depends on you. If you want to be good then there are a lot of opportunities here like the workshop down here and the teachers to help you to improve your 3D. and the teachers works close to you and they help you, also, it's very open I think and it makes you more creative and helps you to guide you. I'm ready to work, I would say because while I was doing work experience the process was the same. I think the good thing about this course is it's open and very, makes you more creative and like the design process is related to the industry.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

I think it is more like, it is helpful. I has a lot of tools to use and it has the, all the computers and the drawing boards and all the, important tools. But I think the feeling of the s studio, I think it's more like an office. I think if it was like made of real wood or like if the flooring was like real wood and more, more kind of, kind of natural feeling, or like if it was like that, like not like this kind of ceiling, I think it would have made you feel more creative than if it was like, this kin of tale, like everyone would be making more creative, just my opinion I think.

Ok. So you think the environment have an influence on creativity.

Yes.

Ok. Interesting. Ok. Is it encouraging or inspiring?

For me it's not inspiring. I mean, I like to, I like to work in nature and also I like to work at home because I have my own space there and so it makes me more inspired and more productive but here I feel like I don't feel as much as inspired than if I were at home or in the nature.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I always make time plans for each project and very detailed one for each week, so it helps me to move forward effectively and faster, and I like to start with the pan and then first stage I like to explore the concept and like, start with the mind mapping and try to think creatively and not to think of the final outcome yet. Or like not to think if it's a restaurant then not to think about the rules and regulations about the restaurant but think what the space is. What is it about restaurant, about eating and socialising. Think about the functions and think of the concept.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

I think the project tasks are clear to me. I think the module guide is helpful. Makes it easy to understand but for this year I think it's, everyone now, everyone now project are different, so the tasks are different as well.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

The main challenges and issues would be, I think that each project has different challenges [laughs] and issues. So, for me, now the challenge is like, trying to make use of the each

space and trying to come out with the sensory experiences that the clientele can experience. so like, making it more cohesive and that's been one of the challenge that I'm facing now.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Oh yeah, it was, it was different than I thought. I thought we would have would have like, lectures and like, talks and, but here like, it is more open and just like, one to one kind of a course, but I like it more.

12. How do you see yourself as an interior designer in the future?

I would like to work in high end residential and commercial projects. And I would like to be a successful interior designer and I would like to promote Mongolian art through my designs and be part of the interior design development in Mongolia.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I prefer to work alone but in real life, in reality we will never work alone. We will always work as a team. So we will need to have teamwork collaborations skills. It is essential as well. But, personally I like to work alone so I can go with my ideas and not consider others' ideas. But I can work as a team. Because yeah, it's important.

14. Where do you prefer to work on your project? Studio or home or another place?

At home and nature, because it's inspires you more and it's your own space. Sometimes I also like to sit in a quiet café and just think and explore about my ideas and, change the environment. So sometimes it makes me inspired and not only sitting at home or in the nature or something like that. I like to change the atmosphere as well.

Ok. So you like to sit within changing places. To get more different inspirations.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

From my ideas I start to do initial sketches first, and try to do just paper models and after that I refine my model, make another model and, and then I start to make like a real sketches, or like perspective drawings and stuff. And then I do it on computer drawings on, on 3D max or on Revit, so I can see my mistakes as well. I think this one gonna work better,' what kind of evaluation you do for your own ideas?

I choose the most interesting one and see how it relates to the other ideas and cohesive ones.

16. Are you confident sharing your ideas with your peers?

Yes. I am confident about sharing my ideas within a teamwork and with my peers.

17. Do you like presenting your project in front of others?

Yes, I like presenting my work.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Write a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticise idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally. For me, I like to work on the conceptual idea. Framing the conceptual idea and drawing sketches of my ideas and, and start hand drawing planned perspective in furniture.

19. Do you prefer thinking of the holistic picture or the details?

I first think of the big picture of my project and then go into detail. But I, I like to think big, first.

20. Do you prefer to solve problems and find solutions through words or practically?

I do more sketches instead of words. But I also start with describing with bullet points, so the ideas. Just like bullet points. Just like important ideas that I should explore and then move to the sketches. So, both Words and experience. I like to be up to date to new technologies and to new materials and it depends if my project is going to be like contemporary and like, very, how do you say, very Hi tech. yeah or it depends. I think it depends.

21. Do you prefer gathering lots of possibilities or deep facts?

I like to gather lots of information about my project before making a decision.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

I prefer to solve my problems, I guess in a new way. [laughs] Just, I'm not scared of making mistakes because this is the time for me to explore and be creative.

23. Do you prefer to organise your work or to work free style?

It is about being inspired and working productively.

24. What is your motivation for your project? People or tasks?

I think it's both because I like to create the productive atmosphere in, in my home, like putting nice classical music and like, putting, like, dim lights and low light, not like fluorescent lams, just like very low light and like create a cosy environment and so which helps me to be motivated and work productively I think that's, I think that's kind of hacking your productivity so, yeah. In order to go inside the productivity you have to,

So the environment has a significant, an important influence on your motivation?

Yes.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

I don't, when I make my design decisions I don't think about what others will think. I just go with my idea. But in order to improve it I have to listen to my tutors opinions and points, so I also use their opinions to improve my projects. Own satisfaction

26. How do you perceive criticism? Tactful or direct?

Tactfully for sure.

27. What is the social environment that encourages you to work in groups?

Friendly and in harmony.

28. What do you like more: starting or finishing tasks?

Starting and finishing

29. What is more important to you: being creative or being organised?

The creativity standard of my ideas I think. Actually both, because I have to, if I started form the creativity, so then I have to test it for functionality. So it has to work in a functional way.

So, if it's a creative or like a crazy idea, but if it doesn't work in reality then I won't pick that idea, so I test it in reality how it would, could work. In a functional way.

30. Do you prefer working following a structure or being spontaneous?

I like to work by following structured plans.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I like to work in a quiet environment but not like, an office building with grey walls, or like a cold environment. So, none of both. I like a warm and inviting cosy environment.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

Deadline, because I always go through my schedule and through my time plan so, I don't stress myself but still because I know how much work I need to do till the deadline and I feel like it's under my, I try to be prepared. It stresses me sometimes but not like turns my mind off or, I just work harder and harder until finish on something.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Ok. Starting from here. So, green, blue, white, yellow, red, black.

Can you explain why you put them in this order please?

Yes. Because starting from the brief, you have to be creative and then think about the, the process of the project and then doing research is important to it, so you can come out good ideas. And then values and benefits become important. And then the intuition feelings and hunches. And I think then the, the last cautions and difficulties.

Ok. Interesting. Ok. Thank you so much An.C

Thank you.

I wish you all the luck.

Thank you very much.

Students code: Mi.C

Institution (3)

Date: 4 December 2014.

A) Supplementary questions:

1. Why did you choose to study interior design?

I, it kind of started from, I like architecture and art and I really like to draw. And from the length of study that I wanted to do architecture and it involved more mathematic and stuff, which is, I think I like to start from something a bit smaller. That's why I chose interior design.

2. Why did you choose to study interior design in the UK (for international students)?

Thailand. I lived in New Zealand for three years. I started in the UK because I have a great experience study overseas before. I was in New Zealand and I spoke to my parents that I don't want to lose the English language, that I already good at. And we spoke, we spoke and we decide it's either going to be in the Europe, America, and then we end up saying that in Europe I would gain more experience in the term of travelling and, you know, there's like, England and Europe in the Europe it's easier to travel. That sort of thing we were thinking about how safe the country was and most of the, there's a lot of student, the Thai student over here, and they have mixed culture and, Then here for the bachelors. I'm everywhere. [laughs]

3. Why did you choose to study at (the name of the institution)?

I had my foundation year, you know how every art student, if you decided to study in the UK then it's a foundation year. I did that in C., yeah it's called C. school of Visual and Performing Arts. And I, I chose to study in C. because I feel that the environment in the city is more suitable than in a bigger city. Small city and, there are many, many great colleges and university in London that does art and design, but I don't feel that is a study environment. But I didn't know it was C. School of art before I chose here. [laughs]

4. Which year are you in?

Third year.

5. What kind of skills or interests do you have that drive you to study the interior design programme?

There's, I like interior design, well, the start that I mentioned architecture before, and I also mentioned graphic design. But the thing is, graphic design is more 2D and architect is 3D

isn't it. But interior design it kind of falls in between. You can do the, the..... for example spatial design as well, placing thing onto like units and things like that, so that's like a 3D part of it, but then you also have this decorations bit, that can be like 2D and you know, colours and decorative parts of it yeah.

You mentioned before your drawing skills. Do you mean like freehand drawing or CAD drawing.

Yeah, More freehand drawing. Um, maybe is like a sense of design that you have in yourself. You know, sometime, you might come up with something that really original. That's one of my strongest part is coming up with original ideas. Yeah.

6. How would you describe your experience studying interior design? Why?

From the experience I find that interior design is a much wider range than what I know before. You know. There's a lot more. There's more than just commercial and residential. The, the more thinking process about why would I place this particular chair in the room. What does the atmosphere it create, the light design. The, also the design history as well. I find it interesting that a lot of architect and also interior design is tied really well with political and how people feel each other back then. They are very, thinks like that.

I have a good friend who does history, so exchanges we try to find a link about architecture and you know, history that was back then. So things about, lets say like, gothic, lets say gothic design. They got a lot of influence form the catholic, the religion which it was huge back then isn't it yeah. So it's, it's about what's going on at that time that also mirroring the, the process of thinking the process of idea the process of using visual communication to, to make other people believe in like the same thing as like, you can see that a lot of like, back in lets say fourteen and fifteenth century. Ages ago they you know they used painting. They portrayed people that like catholic, or people in a certain different religion and different ways. If you look at the church painting you can see that they are [...] if you love our god, not that god, then you are like angels and you are like in the heaven and all cloudy and soft and things like that. Which is quite different from other religions. Which is like, they kind of use the idea of being good, not attacking, but use them to like, visual communication cause that's the easiest was because back then not everyone can read not everyone can understand things. So they used visual, communicate visually.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes I do. Yeah. I do. I didn't realise it but, you know. [laughs] Couple years before. But when, when you design something, or when I design something I sort of really fall into it and then I, I'm just one of those people who get bored really easily. I get tired of my idea. I don't

know where to go, I don't know if it's good or if it's not. But when you get to talk to other people or other student in the same year different years, younger or older, you know, everyone have different point of view. They have really good opinion, they can tell you what is a really strong process that you have and what is, doesn't quite work really well, things like that.

Yeah it's more about talking and sometime when you talk about your project, it you have to make it clear for other people to understand. So it's kind of simplify what you were thinking as well that's helping myself as well.

You can see, you know, when someone like you project or when someone like what you doing you have this confidence to do, to yeah, I can actually do this feedback that you get. Cause if, if you. If you don't get any good feedback you maybe fall back, 'maybe this is not my thing' sort of type, so when people say that 'oh, yeah, this is really good idea' or when you get positive feedback it makes you, yeah make you, just work harder cause you really want it to come out really well.

Inspiration depends on what question you're asking the other people as well. Cause if you're asking for inspiration then yeah, they offer, then have really good idea or have difference perspective of the project that you haven't looked at.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

How do I manage it? I often use a lot of time to do research, and coming up with the idea because I, I find it, I find, how do I say this, I find it more, having more identical, when you have the original idea, it's like, try to get an original idea from all the research you have done?

Yeah, like for example, the project that I'm doing, I've got about six ideas, which is in the same sort of category.

But they are just all very different why could be hand craft they could be about travels they could be flowers or like cultural identity or something like that, but they, you can see that they are coming from the same place, that sort of thing. Yeah. And you know it takes a lot of time to come up with why is this object interesting. Why this particular object speaks to me. And after, sort of, pick everything up and then sort of pick out what is speaking to me from this object. It's also, like, you know, when you see something that others don't see, that's like, that's quite fun, in a way, and it sort of speaks, as the quality of being designer is to see simple things that other people just don't. That's what I look for as well.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

As a third year student, We get to come up with our own client. We get to write what we want to do. We get to manage the whole project by ourselves which is different from first year and second year that you've been given a client, you've been given a place, a building, and you have to sort of work through that, but as a third year, it's whatever I want. Which is more personal but at the same time It's very difficult because, you know, it's kind up to me if I want to drive project harder or faster or if I just want to pass. You know. I could be easily, like 'aright, this is done, I don't care about it no more' and I get pass, that sort of thing. So, yeah. It's, no I don't think I need a lot of effort to understand. It is quite clear of what we have to do, yeah.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Yeah, I'm trying to think of. I think working by myself is difficult, that's why I said working in a studio is quite helpful.

I mean ok, working, how do I say this, like, every project in the real world, you can't do this by yourself, that's how I view it. And to imagine that I have to do everything, just, just to get a mark. I understand that knowing, like the more you know, the more advantages you have when you're working, but, it's just impossible to know everything by yourself isn't it. And I find that if I get to be the sort of like leader of a group, and then have like people to help me, then that's really helpful. But then again, everyone have got their own project, isn't it. Like last year, we get to work the, in the group. Like, you get to work in a group, but you didn't get to choose like, who we're working with. So some people will have like, they are in the same class, but they have no idea who the other person is, like they never talk to each other and that's sort of difficult in a way. But then at the same time, because you never know them, you don't, you don't have that like girl best friend talk, sort of like, when you want to say something you make it more professional. Like when you work with someone you don't know. That's the view I've got. But um, it's yes, [...] like debating of which idea's better and it can be really awkward for people that never spoke. Because someone is more like, oh. I shouldn't say it because they're not confident in their idea. So, there's still a bit of a gap between working in a group and working individually. But I would prefer to have people that would be able to help, as a student like, help working to form one really good project. Yeah.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Before I enrolled this course I had spoke with my, with the course leader, and he explained what had the plan for, like each year is, because, and then he did mention about, well, he didn't mention about the need to do sort of more technical like, way of thinking, because before I, before I enrolled with this course, what interior design for me was just to like do a plan. Do a plan of like, where the beds go, where the, residential plan. But, yeah, I didn't quite expecting you know, a more creative, more conceptual design than, yeah, than um, before, yeah. So was more,

It was, it was like. I know that there's gonna be more than what I know, because I'll be studying, but yeah. Things like, well I mention that I quite interested in other designs as well, so like stage design and theatre design, which is quite interesting to know of. Or like window display and those sort of small area, but also linked to interior design in my, and yeah. We finally get to do some of that really different from what interior design was.

12. How do you see yourself as an interior designer in the future?

[laughs] I would try to apply the interior design knowledge that I have to whatever I have to do in future.

As like, I have my mum back in, back in Thailand. She has a company which is design fabrics. Then we get them produced and factory and yeah, we also do sort of, exhibition and things. So that's just I think I would be somewhat helpful for that. But then I also need to do, sort of business, maybe, import, export thing, that could be linked to product design. So, because in Thailand we have got a lot of amazing wood and materials and they're quite, you know, there, this is like the supply we have, and we'll be able to send them to other country, they can be really, you know make a lot of money for that. [laughs] I just speak. Yeah. In textile design.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

How do you like to work on your project? Do you prefer teamwork or working solely on your project?

I still prefer teamwork. As I already mentioned before, because it's like, when you work on a project that is quite big, you need a lot of opinions and idea and it's important to me to see what other people think of the project.

It's hard for you to see how other people think?

14. Where do you prefer to work on your project? Studio or home or another place?

Yeah. I do prefer to work the project in a studio. One, you got a lot more space. Two, it is a working environment isn't it. You see.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

A good answer would be doodling, but, like sketching, but sort of, keep going like, yeah, cause this is quite, this is a question that [...] quite a few people ask this question. They said why would, why were sketches still important when you can use CAD and there are so many program, like computer program that you can use that are so much better. More accurate and, you know what I mean.

one of the tutor, I'm not sure which one. He said because when you're designing something, it shouldn't be based on what computer can do. It should be based on what's in your mind. What's in your head. So somehow you want to do this like amazing curve, but the computer, sort of say that, 'oh, but in really life engineer, you can't do that.' But then, the computer never know. What's in the future can do.

Anyway I also start my project by gathering pictures. Looking at the theme. Like, the concept as like the first thing that comes tom my mind about what do I want to see. I, I start from what I want to see. For example in that room. And so, work backward a bit. So coming to why do I have that picture in my mind. But then, that picture is never gonna be used. It's just gonna be like a starting point of what I was gonna have. And so I work backward and see what the theme of that room is and work from there to have a, [laughs] yeah.

16. Are you confident sharing your ideas with your peers?

Not very, and it depend on the people and the type of feedback.

17. Do like presenting your project in front of others?

I do like to talk about my project. It just, to, because I enjoy it. Because I want to say that oh, this is what I've come up with. Sort of like a kid, you know, 'look what I've done!' [laughs]

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.

- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

Yeah. I quite like b, the problem. What identifying the project task and problems. So b, because shall I try and explain why? Yeah? [laughs] I feel that designing is to either something new, or improving. So when you find, or when you address the problems or when you address something that oh, could be made better, that's what design is. So like, just want to say that for me designing is not just, it's not painting. It's not just 2D drawing. It could be engineering, it could be product design, it's something to make human, sort of, human use better. Yeah. Just to help. Yeah.

drawing sketches is like a medium. It's a medium in which to communicate to other people. Yeah, that's how I, that's it might be interesting in a way of telling your idea to other people.

Maybe presentation, I like presentation because I feel that, you know, every project, obviously can make from like, other designers they got like, they got, they work hard to, to, to be where they are. And as a designer I know that there's a lot, a lot of thinking and research and drawing and everything into that project. But not everyone is a designer. so how do you present that to make it clear. Make it simple enough for everyone to understand. I think that's, yeah.

19. Do you prefer thinking of the holistic picture or the details?

Mine would be the whole picture of the project. Like, the whole picture and then, if it's need more detail, but it always does. But um [laughs] if it's need more detail into particular joins or particular furniture, or colour. Yeah, it, then, it'll worth working onto like detail and that because, you know, there's a lot of joins and how you built in furniture and things like that. There's always so many people that know how to do it. But you know, maybe come up with something else that's like, what you need to design. Also there's also a sort of engineering part of it.

20. Do you prefer to solve problems and find solutions through words or practically?

To solve the problem, I would say practically. Yeah. Doing models or drawing. You know, like, doing um scale of the project and things like that. Yeah because, I mean words is good to start with. Like when you come up with something really quick like brainstorming. Just to write down something, like the keyword, something really quick. But, to put that word, you know, like some word can mean so many, have so many meanings of it. It just, more specific if you get to, you know have a hands on.

21. Do you prefer gathering lots of possibilities or deep facts?

Oh, ok. I would say more, more width, not much in depth really. To find a solution, I, it really depends, but to know more into the, the more shallow, but big shallow area, it's good to see sort of from different perspective, you know, but then once you got your, got like, got, the key point, say, if you got your key point, then that's when you go deeper into researching like every perspective of that one thing.

I feel that from all my research at the end I have to pick one quickly. But um, other research you already do, they're not worthless. You can always come back and look at it again.

Maybe just something that, you know, at the right time and the right place, it could be useful. So, yeah. It's like, I had to choose one of the, maybe the form, maybe the function of the object that has really spoken to me, or the um, the philosophy of it. Things like that. But then I combine them to other idea, other research I have done before as well.

Someone to have a stronger maybe, you know, shape or maybe colours. I guess stronger, or the work outcome that I want it to be more like. You know, if you have apple and banana, and you want, well they're both fruits, and at the end of the project you want something that's more curvy, something that's more volume, more volume, something that's like, stand out, then you should choose apple over the banana because red, because round, it have this shape that's like circular shape, for example that I wanted to use.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

[laughs] Conventional safe way, it depends on the problem. On this one I think. Like, if it's the conventional way is like, using other people's research in a way isn't it? Which is help to speed things up. But maybe it doesn't work, like you know sometimes you could get all the research and it would speak all the same thing. But maybe to put that into interior design, it just doesn't work that way. There's like, you know. If you, lets say that you're designing a like a nursery/ So the more conventional way you research it would help more with the original idea in new way. Unless you see that it's ok here to use some risk or take some risk. It's more about like, picking what you can use from the known research and then adapt it into, maybe something new.

23. Do you prefer to organise your work or to work free style?

I like to plan my work, but some times it does not follow the timeline.

24. What is your motivation for your project? People or tasks?

It's a really interesting question really, because I never think about what motivates me every day to do interior designer, cause last year I lost the passion of doing it. I just don't wanna do it any more. There's a lot there's too much going on and I feel like it's, for me, but, what motivates me is probably my family. Yeah. I have quite a rough [laughs] like family situation that's going on and it's difficult for me to, to explain it in a way, because. When I was in New Zealand, I was living with a host family so I wasn't with my family. I was living, sort of, by myself with a family. And just before I turned eighteen, that's quite young, my dad passed away, and yeah, and, I, you know it's been five years now and I'm the oldest daughter. You know, and you can see that, well, how do I say this. When they compare like a family as a house, mum and dad are like the two main that, you know, take all the roof, like all of the pressure and things like that. But now my dad passed away and it's just my mum. So I want to finish something. I want to become something, help her support that roof, that's like, keep falling down. I think this is a very good motivation and push.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

Oh. I'm not gonna lie, it's more like the educator's appreciation. Yeah. Cause, In a way, I feel like they know more than I do. Yeah. They know more than I do. And it just, you know, they've experienced a lot more than I have and, I think it's quite clever to listen to them. And, but at the same time we have got three tutors in our class and when they, when they talk on the project it's all different, so, [laughs] so it's also, sort of, you know, you have all this really, really useful advice from three people. But you can't take it all, you have to pick what you can do, at the same time. So you have to know, sort of like, know your limit, in a way, too, and what is good for your project. Cause, they all give you really good advice, they tell you what they think is best for your project. But nobody really nobody can, can tell what is really the best because it is my project. You know. But listening to all that advice is quite a clever move I think. Yeah.

26. How do you perceive criticism? Tactful or direct?

No, but I would prefer like, if there's a critique. I would prefer a much softer, much more sort of professional way to critique. Like, I can't stand if someone's just like 'oh, I don't like it because, because that person doesn't like the colour' like, that sort of thing.

But when the critique it does make sense and it's really, professional, 'When the critique is good it's when it helps the project, not if someone just said, 'oh, yeah, I love it' but not necessarily say why, it has to be like, 'thanks' kind of like 'hm, this is helpful'. [sarcastic tone]

27. What is the social environment that encourages you to work in groups?

Supportive environment.

28. What do you like more: starting or finishing tasks?

Finish I want to finish

29. What is more important to you: being creative or being organised?

Ok. I think part of being a designer is because you're creative. It's because you like something that's suitable for the place. But if, if anyone can just open a book of every, every aspect interior design has to do, and can do it, what is the point of being interior design? You know what I mean? So for me it would be the creativity, because, yeah. Because, you know. It's like, it's like saying, everyone has the same original knowledge. But what make you a designer is because you have that creativity and it brings everything up. It bring all that basic knowledge like, up to another level.

Ok. How do you define creativity.

Oh, now that's quite difficult. I think creativity

Creativity for me is new, innovation, and possibly helpful.

30. Do you prefer working following a structure or being spontaneous?

Yeah. It's like, it's like drawing a line to every dot. It's like if you have five dots and you draw a line, how you connect it and that's your deadline. That's quite structural plan. Like time plan you're talking about.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I would say exciting activities. Yeah. Like, if someone, you know come in with balloons I would love it. I did try to do it. Yeah cause I think, to be creative, well, this is what I found on the internet the other day, and it says if you want your worker to be creative you need to give them enough time to play. So, yeah.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I dunno, because deadline is just, I treat it as, like, you know, when you're working in the real world it's always something gotta be finished. There's always a deadline for it. Deadline for us as a designer, deadline for us mean when the other gonna start producing it. So, you know, that's like a big process, which is, which is like a starting point of it. So, it doesn't, doesn't stress me out. I just kind of know, accept it that, you know there's going to be a deadline somewhere.

I do plan my time quite wisely. I mean, I, I can't work nine to six or nine to five every day. I'm not that, I can't do that, it's more like, 'oh this thing come up, oh, I want to work now', I mean now as like, like literally now. I have got this sort of, like a quick flash of energy, like every now and then, and it is because I probably just like, in bed, nearly fall asleep and then something just came up in my mind, it's like 'I have to do it now' [laughs] Otherwise I will forget. All this little detail that just flash in, it's just gonna flash away. So, you know, when I know that that's how I work, that's how my brains are. That's how my body works in, in a creative process, I often plan more time than I actually need. Cause um, I know that I, I'm quite good at sketching. So I do it really quick, so that's like, I know my strong and weak points. You know, in a strong point I just researching and just squeeze in like really small amount of time. But with my weak point, actually it always happen, if you compare, it will work at the time you don't need it to. So just kind of plan quite wisely like. For example I'm not very good with AutoCAD or computer 3D rendering. I just, it's very new to me. So, you know, I would give it quite a bit of time. Or if I don't need to use it, I wouldn't use it. So deadline is just kind of accepted. I just kind of accept it.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

So put them in order of what do I think about first? Ok. I would go with the white hat first. This is very, it's kind of like, information available, is kind of, sort of basic knowledge that, from the project isn't it. So, I can go a lot down to what I actually need to do further research on. So, next one is, I would say [pauses] I would say thinking process. The blue hat. But at the same time with the black hat as well, Cause you need to think about what's your limit. It would make more sense to um, green and yellow. What do hey mean by value and benefits. As like, to the project, or possibility, So white, blue, black, yellow, green, red.

Students' code: Be.C

Institution (3)

Date: December 2014

A) Supplementary questions:

1. Why did you choose to study interior design?

I chose to study interior design because, it was something, what my idea of interior design, um has always been part of my life forever, since I was a child. I have four siblings under me, so five all together.

2. Why did you choose to study interior design in the UK (for international students)?

Is because my partner got a job here. Otherwise I would have kept studying it in Australia. I didn't come to the UK because of British design history or British architecture or anything like that. It was purely because my partner got a job, and um, uhh, it was, my, his job is was at a university which offered a design course, so it was very easy for me to leave my course in Sydney and come to a course here and continue it, um, and that's the same reason I'm studying at the C. school of art, it's because he got the job at Anglia Ruskin University.

3. Why did you choose to study at (the name of the institution)?

It's attracting students from a wide range of different places and so the course is actually benefiting from that, even though C. itself is u, it's not as dynamic, and it's not as varied and it's not as interesting a town, um, but the course is pulling people that are dynamic and interesting, and so that's, it's worked out quite nicely.

4. Which year are you in?

Third year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

My skills and interests are, the thing that I'm most interested in is environmental psychology. um, and I want to do further study in this area.

I'm interested in how it feels to be in a space and what impact the space has on our emotional life. What are emotional responses to a space.

Imagining. I could imagine something in my head and then I could actually make it, like I um, I lived in New York for a year, and while I was there I was a Feng Shui designer, and I didn't

have any training or anything, it was just that I could solve problems with interior spaces. Um, and I never, I never thought about studying it, because again I just thought, well obviously you don't put red over there because your supposed to have it over there.

On different sides of the room, or whatever. And so, that's Why I sort of ended up studying it. Because I needed something to study. I was studying to be a primary school teacher and um, and all my friends kept saying 'why are you doing this when you should be studying interior design', because, the thing I was excited about was all interior design related. I loved buying paint.

6. How would you describe your experience studying interior design? Why?

My experience so far has been, um, it's been very educational and I'm quite surprised a lot of the time because a lot of the people I'm studying with have brought ideas about interior design that are very different than mine. So a lot of people have come to my course, um, perhaps thinking interior design was more about interior decoration, and um this has been really interesting to me. It's been very interesting to me to notice um, people's past experiences with interior design. People's response to furniture and interior fittings. An example of this would be someone who I'm studying with at the moment, who came from a very different cultural background to my own, and her ideas of expensive furniture were very different to my own.

6. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

I would describe the studio environment where I'm studying now, um, I , I think it's enormously helpful, in on several levels. It's helpful to me because I like the architecture of the building that the studio is in. I like the amount of natural light.

We have windows on three sides, and that is very rare and very special. Um, uh, I don't like the carpet. I don't like the desks. I don't like the lighting. Um, so, you have to take

The physical environment is, is both wonderful and awful at the same time. We have an enormous. Um, we're very lucky to have the number of students to the number of tutors we have. I really, really, really recognise this. And the variation in the tutors experience is very rich as well. So we're working with past graduates, were working with working interior designers, we're working with um, people with a huge range of experience from all over the world, and that's, that's enormously helpful because uh, one of the things I've realised with that is that my experiences are now becoming much richer because I'm responding to so many different ideas, and so many different questions.

I find the space really encouraging though. The teaching is great, the natural lighting is great. Um, the amount of space in the room is great, you can really spread out. Um, and I think when you're making models and when you're drawing and everything you want to be able to spread out, and so I find that really encouraging. I find the teaching very encouraging. Um, there's one tutor particularly whose joined the staff this year and her experience is very extensive and she is enormously um, enormously encouraging. She sees things in really exciting ways.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

I'm very lazy. I procrastinate a lot. I'm renovating my house at the moment and I will always do something like paint a wall before I do my schoolwork. Um, and the reasons I think for this is that the wall is in front of me, it's a real project. Um, plastering is in front of me. Learning about electrical wiring is happening now, it's live. It has to be done.

Whereas my school work isn't any of these things. It's, it's writing it's drawing, it's being, yes, it's being creative which is wonderful, but learning how to plaster a wall is being creative too, but it's more enjoyable because it's real. Um, what I've done this semester and this year actually is make my house into my major project, so that ,um, I have a better synergy and things are working better together and things like that. Um, and so what I'm doing with my major project is making small scale interior objects and furniture, and they're things that I've made in my house in order to be able to live in my house. We had a project that was designing um, a space for a family who owned a helicopter and a series of classic cars, who had a very large house in the country, and we had to design a new kitchen for this family, and um, I started looking at bespoke kitchen cabinets that were made um, out of English oak, and um, looking at resale stores like um, Harrods and very high end special stores. The kind of department stores that offer personal shoppers and things like that. Um, and high end finishes, very expensive tastes. And someone else from my course whose from a very different cultural background altogether was looking at a very generic high street store that was um, selling badly and inexpensively made rough iron dining tables with tempered glass tops and things like that. And these tables were retailing for about a hundred pounds. And I was looking at dining tables that were retailing for sort of six thousand pounds. Um, and that was very interesting to me that people have come to this course from very different cultural backgrounds, that they have brought their idea of what is expensive with them, whereas I have, I'm from a different cultural background as well, but my cultural background is very similar to the UK's, in that I know what an expensive product is, and what a desirable product is, in this culture, whereas someone from um, Sierra Leone, or someone from

Kazakhstan will have a very different idea of what expensive furniture it. And so that's been very interesting about studying interior design. It's also been very interesting for me in my own understanding of interior design. Um, there's, there's an interior stylist that I know who I admire. Um, I don't know her personally, she's worked in New York, she now works in Australia.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

Yeah, they're really, really clear. Um, I spend a lot of time talking to the course leader, about what he wants out of a particular project. Um, an example of this would be if a project we had in second year, semester two, called fourth studio, studio four, where we were redesigning a dolls house. The dolls house was supposed, my understanding was that the dolls house was an abstract concept of um, of, uh, a space, um, that was by no means to resemble a house. It was by no means to resemble a space that a small doll would be played with inside this space. It was about being, um, a conceptual idea into a real model.

Unfortunately every other student in the course thought that they were making an architectural model of a space. So they designed a space with a computer and then they built that space with some cardboard and timber and plaster and all sorts of other materials. And were very anxious about trying to create realism. So a lot of fake grass, a lot of over scaled pieces of timber trying to look like scale timber, of one to twenty five. Um, and a lot of very sort of um, unresolved scale issues. Um, my dolls house turned into a child, a child's toy that was all about learning about um, tension and compression in architecture um, and it, I used knitting and I used um, plywood in everything but I didn't pretend that this was anything else.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

the challenges and the issues that I face in my projects uh, um. My own sense of time. Time management, which we talked about. Um, the fact that I can't have conversations about my work with other students is also hard. So, what we already talked about. Um, I think the projects are fantastic. I think they're really exciting. At least they aren't all about interior design, they're very varied. I think that's wonderful, it's really helpful. Um, the educational structure, u, I'm not sure what you mean.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

12. How do you see yourself as an interior designer in the future?

I would like um, to open a shop with a fashion graduate, and with a fine art graduate and I'd like to work together with these people to um, make a hop that we could work in together and do different shifts and sell each other's work. I would like to keep creating work. Um, I would like to um, I don't like residential interior design. I don't necessarily like retail interior design. I don't like public perception of interior design. Um, I don't like computer aided design. I don't want to work in an office where I have [...] a computer and I draw up other people's ideas. Um, uh, I do want to be able to have time to keep going to museums. I want to have time to go to European capital cities and see things and do things. I want to make my own choices.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

30 – 70% 70% on my own, 30 % with the team. I like to make choices. I like to work to my own timetable. I like to work freely from the ideas in my head as they happen.

I don't like to explain an idea. Because I think that a lot of the time, if you explain an idea, it worries me that it will die very quickly

14. Where do you prefer to work on your project? Studio or home or another place?

This is another shared one. Um, at home probably again about 70%. In the studio about 30%. And I see the studio as another place. There isn't another place that I can think of. It's home or studio are the only places that I think of. Um, and again because, the studio is distracting, you've got a lot of other people it's. it can be distracting in a good way and it can be distracting in a bad way. At home I can be distracted by other things as well.

But I can time it out. I can eat what I want when I want. If I want to go for a break I can take the dogs for a walk and I think more. And then I come home fresh.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

I make it immediately in a model. Um, or in real size. Like in one to one. Depending on what it is, what materials I have. Usually it's one to one. Um, timber. I always work with timber cause it's easy. I can manipulate it.

16. Are you confident sharing your ideas with your peers?

Yes I do. I'm not confident enough.

Because I want to avoid other people asking me questions about the work before I have um, a strong answer.

17. Do like presenting your project in front of others?

I want to think of the problems or the things people might ask, so I have a response. I never want to say I don't know.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

I like the idea of, probably b, I really enjoy identifying project task boundaries and problems.

Because I can then solve them with my hands. Um, and I, I like thinking about possibilities and solutions verbally but I don't tend to do it verbally, so much. I do it in my head. In the shower I do it. I do it running. I do it walking the dogs. It's always Turning over and over

There are some things here that I really don't like at all. I don't like hand drawing and I, I don't like working on computer software At all at all, never ever, never ever. [laughs], It's soulless and it just kills everything for me.

19. Do you prefer thinking of the holistic picture or the details?

I think probably more design details, probably about 80%. Uh, no, it's probably fifty, fifty you know, because the design details are the things that um, I have an idea of what I want to design, but then um, the design details are the thing that makes it work, and so it's never been a case of um, uh, spending a lot of time on design details or something like that. It's v very organic process.

20. Do you prefer to solve problems and find solutions through words or practically?

Everyone, I thought everybody in the world was interested in making a nice house. Otherwise why would you buy a house if you didn't care about making a nice house, and uh, the idea of buying a house and living in it, but not actually doing anything to it was very strange to me I couldn't, I didn't know why anyone would like that.

21. Do you prefer gathering lots of possibilities or deep facts?

there's no information gathering. It's, it's now. [laughs] um, it's uh, I, I have very little patience. If the idea is there and I'm ready to start making it then I'm ready now. If I wait till tomorrow it'll change and uh, and I'll never get to see it the way I designed it first. So it's uh, I try and be really, really quick.

Um, I get really cranky if the weather stops me from doing something. Or if money stops me from doing something or lack of money. Or the hardware shop. Really, really cranky. Because the idea is there and I'm so excited and I want to make it.

And I know that the next day that will change.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Not be safe and to always be taking a risk and to um, to be asking questions, to be making other people ask questions about my own work.

23. Do you prefer to organise your work or to work free style?

There's always so many projects it's about what mood I'm in and it depends on the weather. It depends on money. It depends on if the hardware's open. Um, they're the things that, that stop, but there's always something else.

24. What is your motivation for your project? People or tasks?

I work on is just, uh, I have a hole that I have to fill. I need a soap dispense so I make a soap dispense. I need a plant stand so I make a plant stand. completely self motivated

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

. It's being clear and being honest, and passion. It's having passion for what you do. No, I think if you are passionate about it the educator will appreciate it.

26. How do you perceive criticism? Tactful or direct?

Not really well, especially if front of others.

27. What is the social environment that encourages you to work in groups?

Hearing other people's responses. It constant sharing and critiquing each other's work and each other's designs and I think that can push things in fun directions.

28. What do you like more: starting or finishing tasks?

Starting and dreaming and working on open tasks

29. What is more important to you: being creative or being organised?

The creativity, always. Um, you know, we've talked about my response to time. I don't like restrictions. I think you can be more creative when you're freer of time. And I think that you learn more about your own timescale when um, when you're free to be creative ,so I know how long it would take me to make something. I'm learning that as I go. And it means that I can timetable myself better. But uh, I didn't, the, the, the creativity came first, not the time. And now I know about the time because of the creativity first. Whereas the other way around would have a very different result.

30. Do you prefer working following a structure or being spontaneous?

No, not at all. A hundred percent no. U,

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

I prefer, is when I'm at home by myself. Um, um, sometimes I like um, louder music or faster music. Sometimes I like slower music. Sometimes, um, I work better when I've had a big meal or a small meal, um, or a meal I made myself or a meal that someone else made.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

it's awful. I have a long history of depression. And this comes back around deadlines and hand in dates and everything. I always have to get extensions because deadlines, I get really, really sick. Yeah. My skin goes crazy. I get really, really sick. Um, I get really, really depressed and I lose control um, and I get really anxious and uncomfortable. So, no, it's horrible. Really really sick. Um, and I get told to take uh, like antidepressants and pills and all sorts of things which I never do, but um, yeah it's bad. It's really really bad.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

Well it's, it's I say colour but I also, the font. You know, the, the black hat has blue text. It's like anyway I don't know if this is subliminal messaging or something anyway. Um, uhh. Ok, this is quite easy. Um, so it's yellow, then red, um, black never, um. There you go. One, two, three, four, five six.

So, yellow, red, green, white, blue and black.

Can you just give me a brief description why you chose this,

Well 'm thinking about lots of different projects that I've worked on, including refurbishing entire bedrooms with paint and flooring and everything. Through to small scale timber objects that I've made. And the first thing I think of is the problem, um, which is why I'm looking at [...] and benefits and why something might work. So I'll look at um, how a paint colour will look in a room right through to um, uh, solving a problem that you know I need a hand soap dispenser so I need to make one and it needs to do this.

Students code: Ta.C

Institution (3)

Date: 10th December 2014

A) Supplementary questions:

1. Why did you choose to study interior design?

I actually start studying interior design course in my country but I stop it because of, because of the, I had, because of, I had to do military service in my country.

2. Why did you choose to study interior design in the UK (for international students)?

Cause it has kind of benefit. Cause I can learn interior design and also English as well.

3. Why did you choose to study at (the name of the institution)?

Cause, it's kind of personal idea, personal thinking that, yeah, it's very personal reason, cause I really hate busy environment like London.

4. Which year are you in?

Third year

5. What kind of skills or interests do you have that drive you to study the interior design programme?

Actually I kind of learnt drawing for more than thirteen years. Thirteen years. So, you know, I, I don't want to do just drawing, like, or painting, or water painting, something like that. I was very interesting to make a model and actually I influenced by my father as well as he is interior designer so.

6. How would you describe your experience studying interior design? Why?

Cause, you know in the class we can discuss about our ideas, each other and it could pick up ideas from someone and that person could get some idea from me. You know, it's kind of, Interaction.

7. Is the studio environment: helpful? Supportive? Encouraging? Inspiring?

Yes. It's more like, good. Actually I don't like the small whiteboard. It should be, a little bit longer than that and put it a little bit higher because they can't use the low, low part is, if somebody sitting far from the whiteboard they cannot see it as well. Because the reflection.

Everything. Technical. And lots of resources around. And like, the journals or books, materials, everything. Excellent. Do you find it encouraging? I mean here the environment of the studio. Does it encourage you to work more? Yes. the presentation before, looking around the walls and where I watch it and I look it and I, it's make me to do something. And get some inspired from it. Sometimes, you know. 'oh, that's an idea' something like that.

8. Do you have a specific strategy for accomplishing each project? How do you manage your time through each project?

Kind of. Yeah, kind of if, I'm usually start to find some images from the internet first, and then when I've found it, I just draw that and repeat it just drawing, drawing, drawing and suddenly get some idea. Then draw that and when I've finished my concept then I start find some technical stuff. Equipment for my design something small parts.

9. Are the project tasks clear to you? Or does it take a lot of effort to understand, digest and reflect?

It's fairly understandable. Sometimes, I couldn't understand because of the language issue.

10. What are the main challenges or issues facing you when working on a project? Do you have any suggestions on how to solve this issue?

Obviously language. There's in university, but I've never been there. Because, you know, you know, if it is part of my module then I am willing to go there. But it's kind of extra module.

And I just want to, just develop my project more, more than, If I went there, the lecture then I will need to like, two three hours, four hours cause I should prepare to leave my house and come here and attend it, go back home, something like that. You know.

Design. Sometimes yes, yes. Because actually my concept is always from nature. And it's always same I think. So I need something more creative thinking.

11. Was the educational structure or the curricula applied in (the name of the institution) as you expected it to be?

Actually I, some of them that I didn't expected. I couldn't expected. Most of modules, yes I expected.

12. How do you see yourself as an interior designer in the future?

It, my design could be kind of boring to someone. And, but, I would like to design as is, as a compact design, with a, lots of function.

B) Questions deduced from Myers Briggs type indicator:

13. How do you prefer to work on your project? Solely or team work?

I love to do it alone. Rather than in group.

Because we are designer. we are designers so, we'll be designer and we're, almost there. So we're designers, we have a strong idea. Each of us have a very strong idea and sometimes clash two ideas and sometimes they cannot negotiate.

They cannot find something middle.

And struggle. I really hate that.

14. Where do you prefer to work on your project? Studio or home or another place?

The studio. Almost all of the equipment here. As quite big enough to do everything like making, drawing. I can produce everything. Everything on the table, but, but no-one is saying no, [...] enough space.

15. How do you start working on your project? Discuss your ideas with peers or keep them implicitly?

Yeah, just drawing and draw it in computer programme as well, like CAD. And find some problems. I will find some problems.

16. Are you confident sharing your ideas with your peers?

Yes. Tutors will come to me and discuss my ideas, and if they say, this one is good, this one is not, if, I mean, if they say like that. But I like that lecturers say he doesn't like. Something like that. But I really like that, then I just develop that more, then show him again.

17. Do like presenting your project in front of others?

It depends on my feeling about my idea. Actually it happened last year, my group mate doesn't like my idea and I don't like her idea as well, so we just finished the project together because it's group work. And they discussed the idea from me, that idea I just developed it myself, even it's not effecting my result, great, I just develop that.

18. Which is the most interesting part in the project for you:

- a. Thinking of the conceptual idea.
- b. Writ a list of the projects' tasks, boundaries, and problems.
- c. Researching of information related to your project.
- d. Thinking of possibilities and solutions verbally (generating ideas/ brain storming).
- e. Drawing sketches of your ideas.
- f. Evaluate and criticised idea, and justify it logically.
- g. Start hand drawing (plan, perspective, and furniture).
- h. Working on computer software CAD
- i. Prepare the final poster, model, power point show
- j. Presenting your project and talk about it and explain it verbally.

E. Drawing sketches or ideas. EDrawing sketches or other ideas. Ok. You can choose more than one. Think of possibility and solutions, which is number D. And G yeah plan perspective and furniture.

19. Do you prefer thinking of the holistic picture or the details?

Details. I think, yeah, as a designer we should do details more. You know, I think design is all about detail.

20. Do you prefer to solve problems and find solutions through words or practically?

Practically, and modelling.

21. Do you prefer gathering lots of possibilities or deep facts?

Just do it again. Just do it again. Just do it. Just, I mean, just drawing and just have an idea and just put it on the, just draw it and put it on the sketchbook first. Then find some information about that, from the internet or books, then refine it, usually.

22. Do you prefer solving problems in a conventional, safe way or in a new, risky way?

Sometimes take a risk. Sometimes because you know, if I really like it but people say it's not, but I take it.

23. Do you prefer to organise your work or to work free style?

I just doing as a schedule but spend few times on the last weeks. Just doing together. If I couldn't finish this, if I couldn't finish step one, for example and I should move to step two, I'm doing step two and step one as well, at the same time.

24. What is your motivation for your project? People or tasks?

Self motivate,. I always say, I just want to enjoy my module, enjoy my project. Even it makes low grade, I don't care. If I enjoy it.

25. What is more important to you: following your heart to be satisfied with yourself or convincing your educator and following your head?

My satisfaction.

26. How do you perceive criticism? Tactful or direct?

It does not effect me.

27. What is the social environment that encourages you to work in groups?

Listen to me

28. What do you like more: starting or finishing tasks?

Finish

29. What is more important to you: being creative or being organised?

I think creativity standard is more. It's more important, but because it's design. But actually I have some lack of creativity. Yeah I told you.

30. Do you prefer working following a structure or being spontaneous?

I usually structure my plan first. And, but you know it depends on what I've done. And I , yeah. So I couldn't do, couldn't finish something in a schedule, I should finish that last week, something like that.

31. What kind of environment would you like to work in? Active dynamic environment or quite serious one?

Quiet, calm. It makes me, it gives me concentration.

32. Do deadlines stimulate your ideas and motivate you or do they stress you out and switch your mind off?

I sometimes got stressed because if I couldn't finish my work, but I wanted to refine it more. Then of course I get stressed. But this is also half and half. Sometimes yes and sometimes no.

C) The Six Thinking Hats activity:

Finally, could you please have a look on the six thinking hats and use them (some or all of them) to order your thinking moods through each project, from the beginning to the end.

so white, blue, red, then green and black together, then yellow.

Yeah.

Ok. Can I ask you why you put the green and black together?

I sometimes get some ideas and it's very creative, but I sometimes get stuck and black comes first.

Then green. But if I got a idea on this stage, then I could find some difficulties. Like such as possibility or technical things or something like that. And blue and black will be after, next to the green.

Ah. Ok. So actually you don't use them together, green and black keep moving around

Yeah.

So sometimes green and then black. Sometimes black and then green. Ok. Excellent. Thank you so much.

And I really appreciate your participation. I wish you good luck.

(10)

Students Interview coding tables

Institution (1)

Table 1: table that organises and summarises the core data of all students in institution 1.

Institution 1	
Student	Go.L
Creativity definition	I think it is being <u>able to visually show your work in a unique way</u> , a creative <u>innovative</u> sort of way that presents the work. Not instead of having the ordinary day to day job.
Designing process	To accomplish a design project, 1- White: Gather information and research about what is actually needed. To get a general idea about what is going to be in the project. 2- Blue: Managing the thinking process, a sort of structure in my head of what the rest of the project is going to be. I have a diary and I keep my own sort of plans of when I need to do things and what dates to get off. I do that in the beginning of each term so I know deadlines. I need it so I can set my own tasks for each week. 3- Yellow: The values and the benefits. I think it is important to look at in the beginning because it is like the design really. So what are the values and how beneficial are they? I look at different alternatives and ways for great ideas. 4- Black: Then I look at cautions and then different alternatives and think realistically about it. 5- Green: Then maybe I get creative in the work 6- Red: My feelings take a lot of in the end and most of my ideas depend on what I mostly enjoy, like a final stamp really.
Thinking style	White – Blue – Yellow –Black – Green – Red
Personality type	ISFJ
Student	Ca.L
Creativity definition	What pushes them to design an innovative design and things that have never been seen before, (challenging) <u>it pushes you to create unique new spaces that have not been seen before</u> . So, it depends on the function of the time, they can change the space as people need the function in that specific time.
Designing process	1- White: Get around the brief at first, break the brief down into key words 2- Kind of brainstorm what the brief is asking (a starting for me is often a Mind Map so I have a title of a brief in the middle and whole of the brief as branches coming off) that is kind of my thought process.

	<p>3- Then I look at what aspects have been highlighted in them so far. It's just picking up the relative research and then applying it to your design.</p> <p>4- Obviously, a lot of design is inspired by something you see. It's first taking inspiration from all sorts of things, but then finding the important research you can apply to it.</p>
	White – Blue- Read – Green –Black – Yellow
	ESTJ
Student	El.L
Creativity definition	I don't know... <u>maybe a lot of things like unique or never seen before or adopting things seen before and making it new.</u>
Designing process	<p>1- White: I will start with the Brief then information about first thoughts,</p> <p>2- Red: then start maybe looking at different ideas because that is inspiring or</p> <p>3- help you create (green),</p> <p>4- then the (black)</p> <p>5- and (yellow) goes together if that works well,</p> <p>6- Then I think (blue) is along with the white and green hats.</p>
Thinking style	Red – White – Green – Black – Yellow – Blue
Personality type	ISTJ
Student	Je.L
Creativity definition	<u>Anything can be creative.</u> But I think everyone has different tastes and different opinions and different ideas. There is no agreement on one thing, but there is <u>no specific category or character I can think of stands for being creative.</u>
Designing process	<p>1. White: Available information and look at what you have and you look at existing artists and existing designs to start that off. We get the brief, then we do a lot of time on the research. Then we think about what to do after that, it is about how you process developing ideas and do things.</p> <p>2. Green hat: Alternatives and creative ideas, because with research you get all sorts of alternatives and ideas you can do, and comparing it with all different ones, you find out your creative ideas. So, you do your research, and do your initial idea, then you do your design. I never really have a timeline or a schedule.</p> <p>3. Red hat: Intuition and feelings, your feeling of what you like more and what you think is the best. That is what I usually do.</p> <p>4. Blue: Then I think of managing the process. I put it in perspective and say my research is done for my creative ideas, and now I need to do this and I sort of managed how I am going to do it.</p>

	<p>5. Yellow: Then I think of the why something might go wrong and you think of what you can do and what you can't do</p> <p>6. Black: Then being cautious of something going wrong and solving the problems.</p>
Thinking style	White – Green – Read – Blue – Yellow – Black
Personality type	ISTP
Student	Gr.L
Creativity definition	<u>I mean fire! I mean spark....</u> Like it is something we trying think as innate within people. It is like an <u>uncontrollable fire</u> no matter how much water you thrown on you can't put it out. Something which is in someone's soul. It is inside you this is what creativity is for me. You can entertain yourself in any situation; you can take inspiration from any situation, that's what creative means! <u>You have got this passion of making things and analysing things.....</u>
Designing process	<p>1. I read the brief, cause that what giving you the marks, then I ask what can I get away with, so I don't just want to do things by the book, I want to do things differently.</p> <p>2. Then I like to mind map lots of things</p> <p>3. I like to collect stuff, I tear them, cut things up and stick them on the top of each other, to look at things to fuel what is coming next.</p> <p>5. Then I might go on a walk and then I see all these things, like I am saying (I see these shapes in this corner in my eye while I am talking to you) and that might become something later.</p> <p>6. I like to walk and I like to look at things and I like to listen to music and then once I got all this inspiration ... Generally, I have an idea and lots of different ideas developing in my mind,</p> <p>7. Then I discard them if I do not like them. Like I have got all these magazines and clippings but I only pick out things that I like,</p> <p>8. So I've got my ideas and then I just try to keep it personal and spiritual, and I like to think of a personal interaction with things.</p>
Thinking style	Green – Red – White – Black – Yellow – Blue
Personality type	INFP
Student	Fr.L
Creativity definition	Sort of <u>creating my own designs</u> , Probably <u>the way that I draw</u> , sometimes <u>I do abstract visuals</u> so, you can make your own mind up. Sort of creative in <u>the way that I sort of put my ideas onto paper.</u>
Designing process	<p>1- White: Probably gathering the information, primary and secondary research. Best start with looking at the site and finding inspiration from the site itself. Primary and secondary research always. More primary than anything else,</p>

	<p>2- Blue: managing and thinking. So, a thinking process with that information. Then, my strategy is I do a lot of sketching, development sketches. That's how I work best through my development period probably.</p> <p>3- Because what I feel I'm best at is sketching. So, that's what I do to develop my ideas through it.</p> <p>4- Yellow: Then I would definitely go onto the good things about it why it is gonna work or might work.</p> <p>5- Red: Then I would start, when it says individual feelings and hunches, I look at that as saying something like, it might not be beneficial. You know. Maybe I won't use that or, whatever and</p> <p>6- Black: then you obviously get cautious and see difficulties at some point I think, along, towards the end of a project.</p> <p>7- Green: And then, alternatives and creative ideas, which would be, me finding alternatives to what went wrong.</p>
Thinking style	White – Blue – Yellow – Red – Black – Green
Personality type	ESTP
Student	Je.L
Creativity definition	A lot of things when I think about it! <u>The use of different materials, lighting, colours.</u>
Designing process	<p>1- Blue: Managing your time doing a plan and trying to stick to it</p> <p>2- Green: Creative ideas are one of the first things you think about when you look at the brief.</p> <p>3- White: you start thinking about the information behind your ideas, examples and visions. If it could work, your ideas</p> <p>4- Red: Mine is sitting my own intuition just to find what will go with it.</p> <p>5- Yellow: when I have done my design, then you have got to make models or designs</p> <p>6- Black: then you realise things are going wrong</p>
Thinking style	Blue – Green – White – Red –Yellow –Black
Personality type	ESFJ

Institution (2)

Table 2: a table to organise and summarise the core data of all students in institution 2.

Institution 2	
Student	Ag.G
Creativity definition	Creativity is amazing looking but also very practical and functional
Designing process	<ol style="list-style-type: none"> 1- White: I had this first idea about making a space within a space and then I started looking into examples of things like that on the internet. 2- Green: I started off with a plan and I was thinking about the most successful way through this piece and different aspects of practicality 3- Blue: And then sketching it all out. 4- Black: Doing more research, finding more examples of if it actually working in real life. 5- Red: And then drawing actual views with furniture, 6- Yellow: Looking for furniture as well as other details.
Thinking style	White, green, blue, black, red, yellow
Personality type	ENFP
Student	Ea.G
Creativity definition	Adding in something that's not been done before or certain colours, certain looks. You're creating an experience that's not been seen yet. You're thinking of something that's unique.
Designing process	<ol style="list-style-type: none"> 1- I do make my own time plan, yes. 2- Once I have an idea I start working backwards. 3- So I find the peer review and then I work backwards, 4- How many sheets do I need to do, what day do I start rendering, I start setting out things. 5- I make notes throughout the project of what I need to remember for my final review and for making up the sheets. 6- And then I give myself a couple of weeks or as much time as I can to do the actual designing.
Thinking style	Red, white, green, black, yellow, blue

Personality type	ESTJ
Student	Li.G
Creativity definition	It's making the balance between design and life. I think it's humans who it's designed for. So, it's through their eyes, so how they experience their life.
Designing process	That's the first. I tend to use creative ideas. So, I saw the information available and viewed it. Alternatives in creative ideas. Managing the thinking process. I think that would be in the beginning and the end, because at the end you usually have to use a lot of 'I've got to go for this.' Yes, I'm going to use it because I think it might work'. And it works and you're trusting your intuition.
	<p>At the beginning</p> <ol style="list-style-type: none"> 1- I started to think about what I would like to happen in the space. How I'd interact with the space, if I was in the space. 2- I think a lot about how people use things and if I have this chair this high, will it be comfortable? If I had the kitchen there and there, would it work? Would it actually be realistic? If it was built, would it work? Would it be something you'll not enjoy using? So, I started thinking about what I would like to happen in the small office. 3- And then I move further on the plan, work on the plan and just start to think what would be there – furniture, what would the layout of the plan be, 4- If I have some ideas, I'll speak to tutors. 5- I read the brief and I made a list of the things which should be in the space. And then I work down the list. 6- I started with the sheet and how it was going. I had a huge list of the things you have to have in the space and 7- Then I narrowed it down into the things I felt were essential in the space. 8- And then I worked with the essential things and once I'd finished with the essential things, I went back to the long list of the things and see if anything more would work in the space.

	<p>9- I try to work usually not by date. ... I think in my mind, it may be by the date or I try to do... I came in today thinking I'll try and do this. I'll try and fix my plans so tomorrow I can start working on the furniture. I try to maybe do that but before this project I got stuck with the plan for so long, because I started working on my furniture and everything and then in the end I realised my plan wouldn't work and I had to go back.... I'm still working on how I actually work.</p> <p>10- I think I'm always hoping to get the main idea. What's the main idea of my project? Then I start to work up from that point forward, like outwards.</p> <p>11- I try to get the grand idea of the space. What will be the thing that will work and make it work? And then try to get everything in the space to work with it.</p>
Thinking style	White, red, green, blue, yellow, black.
Personality type	INFP
Student	Ro.G
Creativity definition	<p>I suppose ideas that aren't the norm and pushing your ideas to their limits. Still being in the realm of practicality but just being something you wouldn't have thought would work, but it somehow does work. And I feel like I could push myself to do that more so it's something I need to work on. So be more imaginative or just less predictable, unexpected, I suppose.</p>
Designing process	<p>I try to do as much as I can as early as I can, just trying to get as much done, for especially the first reviews, because I find if I have a project that would be acceptable for an interim review or a later review, but I have it for the initial review, then I'm going to get feedback that I would have got later, but I'm getting it now. So I can bring it up to a level that for the interim review is going to be even better, so I'll get better feedback from that. And then, I can take it up for the end of the year, because you get to go back and re-do projects, so it's just getting feedback I wouldn't have gotten if I'd waited. You know, later on. So I guess that's what I try to do, just get as much done as soon as possible so I can get feedback and work on it, then good.</p>

Thinking style	White, yellow, green, black, red, blue.
Personality type	ISTP
Student	Vi.G
Creativity definition	'Creative'. I guess just being expressive and seeing people's reaction to my art and making the environment I'm in more colourful and friendly because I feel it's ...really enjoyable making things inspiring for other people - their gloomy day, making it brighter, that kind of positive energy. Participating in the world, like giving a positive impact, like every profession. If you're a doctor, you're not that creative, you follow strict rules of safety, but in interiors you can get loose, I guess!
Designing process	I try to read the brief and stick to it. That's the most important thing I see because no matter what you do, in terms of the final result it will always be different. Because creativity and colour are always in my eyes what I see as appealing or not appealing, it's very different from everyone else's view so it's interesting to see the combination of the rules from the brief and my creativity. That's what I think is always supposed to be the final result.
Thinking style	White, red, blue, black, green, yellow
Personality type	ISFJ
Student	St.G
Creativity definition	The more you can think or imagine things! I think interior design is more human-related.
Designing process	The mind-set and thinking process is completely different [between architecture and interior design] for the same thing. It's quite surprising. With architecture, you get your brief for the building, then you design the spaces, more like a plan, so you say this room's here, that room's there and that's your overall scheme. Whereas here you then take that a step further and you go into like micro-architecture. It's that sort of thing. That's what really excites me about this course. I think interior design is more human-related. I think architecture's more the architect's mind and the client's budget, I think whereas here interior design works better for

	the client and the person, I think gets, you get right into it. That's why it excites me more, you can imagine it better.
	<p>I sort of developed this [design process] still in architecture and here as well:</p> <ol style="list-style-type: none"> 1- I always start with a composite that I get from the brief, from the feel that kind of gives me..... 2- in the early steps, it's really important to have contact with your tutors early on, so you can bounce ideas as well as the other people in the studio to see the big things because if you're then going to do a lot of work for that, you want to make sure it's the right thing to do, the right foundation. If you get everything right at the start, then everything is easier enough afterwards. 3- So, my interpretations of it, that's my big idea. The big idea of this project has to do that for the person using it and then that's where I go next. 4- So then I think, 'How do they go through the space?' and things like that. What sort of furniture and things help create that. 5- So it's always about the experience and the concept. That's my two things. 6- And then managing that, I end up ... I always do like a little plan, I think, like a checklist of projects. I wrote a little list, put a little empty box next to it and tick off afterwards so you can see what you've done. <p>Then you go into the really fine detail of ... the technical detail, measurements and things like that and then everything's finalised. I like to leave it open, so it's like a 'What if?' So I can always come back to it.</p>
	The red one I would put first because you have to go with your feeling with a brief or something. And then have the white card to back that up with, information and research. And then probably the black one, so I can put myself into the boundary of knowing what to do properly. Then the blue one, so that would be me doing my list or deadlines to myself to organise it all. Then probably the yellow one, where I can test my theory out. And then the green one at the end, just to explore, 'What if something's different?'
Thinking style	Red, white, black, blue, yellow, green

Personality type	ENTJ
Student	Ma.G
Creativity definition	Creativity is something different and new!
Designing process	Usually what I just do is start off and brain stormed and try to think of ideas and draw them down. Then I start to think of the layout of the plan and so ever until ... The project usually takes four weeks and until the last week I start getting the visuals done, because I don't like to start the visuals until I have really clear ideas in my head. I don't like playing with the visuals, like doing them and changing things and making amendments, that frustrates me! So, I need a clear image in my head and then go build it and make it. But in the beginning it is thinking and thinking and thinking and then searching and writing down and maybe sketching.
	White Brief Information Blue Schedule thinking sketching Black Restriction in the brief Yellow Look into ideas and looking at different things Green Working on problems Red I feel what is really right
Thinking style	White, Blue, Black, Yellow, Green, Red
Personality type	INTP

Institution (3)

Table 3: a table to organise and summarise the data of all students in institution 3.

Institution 3	
Student	Lu.C.
Creativity definition	Creativity is <u>how you look at things</u> . I really love like messing about with little bits of nothingness and making it into something.
Designing process	<p>Red: First, concept, playing with what the concept could be.</p> <p>Green: Pushing it, seeing what else it could be. I never start applying pen to paper until later on because I give myself two to three weeks before the hand in and it's just like twenty-four hours, twelve hours, just straight doing it.</p> <p>Blue: Still working out, well, sketches and thinking and doing little models and stuff.</p> <p>White: More research. I have a tendency to do loads of research and get loads of images and loads of stuff together by quick sketches.</p> <p>Yellow: Working out how, if this could be actually made into a reality, then, progressing onto 'how will this actually work'. Lock my door, get away, my brain is all over the wall and I start think about materials and stuff.</p> <p>Black: Then panic about the things that might go wrong at the end. I'm able to do it and create it digitally, but because my digital skills aren't up there it tends to bring my design down.</p>
Thinking style	Red, green, blue, white, yellow, black.
Personality type	INFJ
Student	Be. C.
Creativity definition	Creativity for me is inspiration and it's my idea of beauty... And when I'm in highly textured creative spaces, in my brain there's lots of little sparks. Like bling, bling, bling! Ideas. It's being in interior spaces and asking questions, as a creative person you have to ask questions.
Designing process	<p>I do not have a specific strategy in designing, I am very lazy. I procrastinate a lot. I'm renovating my house at the moment and I will always do something like paint a wall before I do my schoolwork.</p> <p>The reasons I think for this is that the wall is in front of me, it's a real project... Whereas my school work isn't any of these things, it's</p>

	<p>being creative which is wonderful, but learning how to plaster a wall is being creative too, but it's more enjoyable because it's real.</p> <p>I don't have to have two different versions of me, one studying and one renovating my house, I can have both, one person, both sides of my brain working together like a civil war between two different ideas.</p> <p>My time management is awful, time management is my main challenge. I tend to design very quickly, I don't do as much research as I should. My confidence in my knowledge makes me lazy to do research. I think up ideas in my head and then I make them and then I present them. It's all about learning about the material and putting it together and seeing what I can create in one afternoon. So, for me, time management is very flexible. Because I think for creative people that's really hard and it's kind of unfair.</p>
Thinking style	Yellow, red, green, white, blue and black.
Personality type	INFP
Student	Ma.C.
Creativity definition	It's different for everyone. You look at things differently, to find something in a simple thing.
Designing process	<p>Red: I go to the place and take pictures, have a look at the place,</p> <p>Blue: decide what I want from the place.</p> <p>White: Then, I go to my client and ask them what is the purpose of the place, the proper materials I'm going to use and I get the whole idea of it. Then, I can start looking at other places like this. Then I get with the concept and then I start the sketching and everything.</p> <p>Green: Then, when I have so many ideas I'm just putting everything I have. Combining different combinations.</p> <p>Yellow and Black: Deciding which can work and which cannot.</p> <p>Which one you feel more comfortable with. Which one will, your client will feel more comfortable with.</p>
Thinking style	Red, blue, white, green, then yellow and black together
Personality type	ESTJ
Student	Ri.C.
Creativity definition	Creativity is out of the ordinary.
Designing process	1- I first look at it in the big perspective and well, I'm doing a project about a harp. A harpist actually. And I'm designing a

	<p>space for her. So, I first take it really wide. So, where she's from, her hometown, how the harp is built. So, everything in between I start to touch it.</p> <p>2- I make models. So, it's really wide and it doesn't lead to the space I'm going to build yet, but it's just a ground I'm making for myself to grab things from</p> <p>3- Then I'm going to narrow it down to the final project.</p> <p>4- So, half way, I have certain points or specific things I want to express in the room. That's going to be for this project the harp and her home town. That's really important and she has to invite all her friends and family because she travels a lot, I figure, so those are the things. And I research them all, so I can pick things from it. And then I'm going to, build it more clearly, so it was really experimental, all the ground floor projects.</p> <p>5- Then, from there I feel like I have a good base to build my final design on. You have a great foundation to support your design. Otherwise it is "I build a room as a harp". It doesn't make sense. If you, research it better, you can explain your design and it will be more convincing if you have a good foundation.</p>
Thinking style	Red, yellow, green, blue, white, black.
Personality type	ESTJ
Student	Ji. C.
Creativity definition	Creativity for me is to question the idea; is it going to actually work in that situation? Is there any value or benefit from actually doing it? Is it going to improve things?
Designing process	<p>We're sort of taught to start with the concept, I'll explore the idea, briefs and needs.</p> <p>Then, sort of the research to find various thing, your elements that inspire you with the concept.</p> <p>And solving the problems that you're sort of given within the brief. Make sure you're covering everything I suppose. Every angle to be able to sort of move it forward, to hopefully a sort of a good conclusion.</p> <p>I'm quite a good planner, I do like to plan ahead. Actually, that was one of the issues I had when I first arrived. Because I've been in business a long time, if someone comes to me with a problem, I</p>

	<p>haven't got time to sit and think about it for weeks, I have to arrive at a conclusion very quickly and I'm, the way I've worked for a long time, so that's one of my problems.</p> <p>But, It's taught me to sort of broaden my vision and sort of do the things that I've got pleasure from, I can actually spend the time doing that, but still I know where I want to be at the end of it.</p> <p>I'm sort of thinking about the presentation, when I'm even building up with the concept.</p>
Thinking style	Red, yellow, green, white, blue, black
Personality type	ISTJ
Student	Ta.C
Creativity definition	Creativity is something interesting, something new or something to keep some feeling, like impressive.
Designing process	<p>I'm usually starting to find some images from the internet first and then when I've found it, I just draw that and repeat it just drawing, drawing, drawing and</p> <p>Suddenly I get some idea. Then draw that and when I've finished my concept , then I start to find some technical stuff. Equipment for my design, something small parts.</p>
Thinking style	White, Blue, Red, Green and Black together, then yellow.
Personality type	ISTJ
Student	Ed. C.
Creativity definition	Creativity is kind of a stubborn woman, if you give her a lot of 'no's' she will be upset and she won't answer you anymore.
Designing process	<p>I actually don't have a specific strategy. I generally, fuel myself with lots of references. I research on the internet or different imagery that I see in magazines and stuff. I'm always paying attention to the environment that I'm in. I think, in travelling it really helps to see things and open your mind and, as it helps you at the moment that you have to work.</p> <p>I think that can be a problem, when it comes to time management. I feel the need to have a method on a book and just follow it, but it does not really exist. I think everyone has to create their own time management method and I think I am already developing this method.</p>

	When it comes to the date of the delivery and I'm all crazy about it and stressed because I have to deliver it, I think if I had planned better before or if I had organised myself that wouldn't be happening right now. So, mainly my time management method nowadays is just researching a lot and you know, surround myself with imagery and other projects, fellow projects that related to what I'm trying to work at right now to feel secure and move forward. About time management I have a gap there!
Thinking style	White, red, green, black, yellow, blue
Personality type	ISFJ
Student	An. C.
Creativity definition	Creativity is about thinking outside of the box and thinking from different perspectives and using your lateral and vertical thinking.
Designing process	<ol style="list-style-type: none"> 1- I always make time plans for every project and very detailed one for each week, so it helps me to move forward effectively and faster. 2- I like to start with the plan and then first stage I like to explore the concept 3- And I start with the mind mapping and try to think creatively and not to think of the final outcome yet. Or like not to think if it's a restaurant then not to think about the rules and regulations about the restaurant but think what the space is. What is it about restaurant, think about eating and socialising? Think about the functions and think of the concept. 4- sometimes I also like to sit in a quiet café and just think and explore about my ideas, I choose the most interesting one and how it relates 5- From my ideas, I start to do initial sketches first, and try to do just paper models and after that I refine my model, make another model and then I start to make like real sketches or like perspective drawings and stuff. 6- And then I do it on computer drawings on 3D max or on Revit, so I can see my mistakes as well.
Thinking style	Green, Blue, White, Yellow, Red, Black
Personality type	ISFJ

Student	Mi.C.
Creativity definition	Defining creativity is quite difficult. I think creativity for me is new, innovation and possibly helpful. Being creative is how you fix this problem in a really clever way that's creative. You could be creative even if you are scientist, it's not just art and design, it is to be creative with your problem.
Designing process	<p>I often use a lot of time to do research and coming up with the idea from all the research you have done. Ex, I've got about six ideas, which is in the same sort of category, but they are just all very different. These ideas could be hand craft, they could be about travels, they could be flowers or like cultural identity or something like that, but they are coming from the same place. It takes a lot of time to come up with why this object is interesting and why this particular object speaks to me.</p> <p>It's also, when you see something that others don't see, that's quite fun in a way and it sort of speaks, as the quality of being designer is to see simple things that other people just don't. That's what I look for as well.</p>
Thinking style	White, blue, black, yellow, green, red.
Personality type	ESFJ

(11)

Educators' interviews coding tables

Institution (1)

Table 4: a table that organises and summarises the core data of all students in institution 1.

Institution 1	
Aspects	Educator 1
Personal perception	A lot of creativity can come when you are relaxed and you are happy rather in your angry and stressed
Creativity meaning	Show me something I've not seen before
Creative student personality	<p>I suppose if they listen to what I have said and how they interpreted or translated to their own language or their own vocabulary rather than just copying what I have said</p> <p>The ones who take risks the ones who overcome that fear of failure the ones you can see them develop their intellectual or develop their creative abilities and they understood what they here for. Which is to challenge themselves and to surprise me, show me something that different.</p>
Studio	<p>I think studio is important, but if you think about it they only spend 20% of their time with me or even in the studio. Most of the time they are on their mobile phones or the computer, they interface with their mobile phones or computers more than they interface with me.</p> <p>A virtual studio is ok, Skype is ok, a VLE of some forms and interacting VLE would be good. As also like to work with other studios remote, in other universities, in other form of collaborative virtual learning environment.</p> <p>I don't think the studio is that important anymore, technologies taking over in a few years' time. Big room like this would not be necessary. Big drawing boards...I think people will stop drawing or they might draw on tablets.</p>
Pedagogical practice	We have students who have done foundation and they are very good. If they haven't done foundation, we have to do a transition period where they quickly get up to speed from being at school or wherever they have been to think in like thinking creatively and would be able to do.

	<p>I think the Bauhaus is still perfect in the work that: Erik Tabor and Harry Thobron, Allen Davie, all those people at L. at 50s and 60s is still as important as now if not more important now.</p> <p>I get these students to observe and look as much as they can, teach them how to think rather than to design and how to make decisions more than anything really.</p> <p>And the way we teach it sometimes is very old fashion, should be different way of thinking of how we use software or IT communication or in a mobile phone wherever it is. Making people think differently about education is about.... I think design education is behind the time in a lot of respects.</p>
Design thinking	<p>Making a cardboard modelling you will think about the space more than you do if you visualising it on the computer. With computers and the computer software, they have now, they tend to use software to sort out their problems. And if they are not very good with software then it becomes very frustrating for them rather than thinking with pencil and a paper. It is computers that can help them and present things, they are being impressed by the quality of the visuals that they do rather than the quality of the design.</p>
Challenges	<p>Students now do become obsessed with marks.... I think also there is pressure from their parents or the pressure from society to get the best degree possible rather than thinking differently or rather than challenging their educational system.</p>

Institution (2)

Table11: a table to organise and summarise the data of the main educator of the course in institution 2.

Institution 2	
Aspects	Educator 1
Personal perception	At a very early state there was no real intellectual base for the subject discipline you had to kind of grasp fragments of theory and process from other areas, kind of reflect upon other observations. At that time, it was kind of a foundation for a lot of what is taken for granted nowadays in terms of the discussions, or in terms of interiors, the significant cultural objects, and I think it is absolutely instrumental. And the way the programme was run, as a kind of, almost like a cult of interior design phonetics it was incredible.
Creativity meaning	Because creating something new from not very much is a creative act.
Creative student personality	Tricky question, being inventive with limitations because in interiors, it has limitations attached to it. Physically and its plan and its volume, creativity judged in terms of how those physical restrictions are dealt with. How would you acknowledge the significance and importance of finding best human interactions with an interior space? So it is not simply creating the aesthetic dimension, but it also about the human and experiential dimension.
Studio	<p>In terms of studio I think the refreshing thing about the studio in this approach is everything is open for discussion as long as it I engaged in an intensive way. There is no orthodox method, different points of work were able to be narrowed and everything is about the interior, it was not kind of close-eyed but very much immersive in terms of interior design thinking. I think the best strategy is a diverse strategy, just as I have kind of previously, I think, embedded.</p> <p>The final crit review if there is everybody in the room together discussing their work sequentially, that does not happen now at all actually, we are working in a much more furrowed way. We still do the reviews but they are broken down to much smaller groups. We cannot take a whole year group anyway because it is too many people and it can't be productive if someone's waiting around for three hours to see</p>

	that piece. It is exhausting for people physically, emotionally and intellectually.
Pedagogical practice	<p>I chose the academic path, it's feeling engaged with developing or live thoughts, it feels like a laboratory for me, the studio is a place for ideas to be teased out, development that's very existing. Without necessarily any products to be the goal but the developing of the ideas bringing the goal. So I'm kind of seduced by that.</p> <p>The role of peer learning is central to the ideas of 'communities of practice.' It is central, maybe a more diverse set with interactions with students.</p> <p>Even in terms of teaching the kind of one to one desk tutorial still happens, but it is not the only interaction in terms of learning, and there are much more workshop-type stuff which will be focused on skills. We are not talking about practical skills we are talking about attitudes or approaches to the design.</p>
Design thinking	<p>The tutor who ran my masters and the head of the department in the undergraduate both are very influential... in masters I think he is teaching strong writing, he was heavily influenced by that way of thinking about design, as it can be a multipronged thing rather than a specialist channel, excluding the design or design education. The head of the department runs the programme effectively and invented the programme, turning it into something nationally very, very strong and very highly regarded and is a very brilliant advert for the subject.</p>
Challenges	<p>So if you can instruct somebody brilliantly, educationally. It's challenging for us, how do you assess that. It has to be all declared and above board you have to know what is going on. Somebody said specifically they had hired someone, or maybe someone is good in model making and someone is good at CAD, but in order to facilitate the articulation of their ideas they have to exchange these skills, that would be fine, as long as they have clear intellectual rational and the aesthetic dimension is clearly defined.</p>

Institution (3)

Table 13: a table to organise and summarise the main data of the main educator in institution 3.

Institution 3	
Aspects	Educator 1
Personal perception	<p>I studied a four-year degree in visual communications, I was very interested in three-dimensional design as opposed to flat design. I applied and was accepted to do another BA and that's extremely competitive to get into.</p> <p>It's actually about imagination rather than creativity. I think, I think. An interior designer has to imagine, has to be both client and designer, in order to be a successful designer.</p>
Creativity meaning	<p>The process. Immediately. An ability to, a process, by which to turn an idea into something else, ideas are easy to come by, but turning that into something else or something useful, something, that answers a question that offers an experience. That offers delight or function. Whether it's decorative, whether it's structural. That process is pivotal. The idea to put things together which may seem disparate from which comes something new.</p>
Creative student personality	<p>We're not really in the business of saying either you're creative or you're not creative. Because I think that would be quite damaging frankly, to the student who may not be so sensitive to their environment. It's kind of how to push that creative process. It's how to push someone's thinking. How to make someone more investigative, more useful as a designer. More sensitive to the visual. More sensitive to someone's needs. Because a good design is thoughtful design. It would be as a problem-solver as well. But sensitive to a whole series of different needs. So you can get into the space, you can imagine being in the space. That's the kind of, that's the mark of rather than being creative, in a sense.</p>
Studio	<p>The best, my own experience in all of this, I think, personally, I suppose it has to be a personal response, I think the best thing is a place where students actually enjoy coming to the studio and use it as a kind of a spring board sandpit idea. To explore an idea and test some ideas out. And, that's a kind of a second year, moment actually. So first year is</p>

	<p>studios one and two are very different to that because they're learning, they're coming to that. They're learning a whole set of thinking skills and doing skills. Third year, there's an anxiety around it because of they are actually seeing the end of it.</p> <p>The history of design education is studio based, it's always been about doing in a space that's the kind of thing. It's where they put it into practice, the studio is a place where you ask why.</p>
Pedagogical practice	<p>The studio is both the space and the activity and the process of developing your creative process. People I've worked with have been extremely helpful to develop my own process and they're much more useful than an artist who I admire.</p> <p>I think the whole process of design education is actually a discursive one. A discursive practice. And while people do and make and draw and carve and do all sorts of making, the ability to reflect and discuss and observe is highly significant.</p> <p>My job has been to map out throughout the whole degree where students need to hit certain ideas, skills, processes, I'm thinking about the thinking process as a skill as well. So where we actually insert these, locate them and unpack them.</p> <p>Because we have a small number of student intake, around twenty, we have a kind of luxury in a sense. We can really moderate aspects of the way in which we communicate with the students. So, sometimes it needs to be quite direct, other types of questioning but ultimately the idea, I suppose, is that we don't tell students what to design, we don't tell them how to design, but we try to inculcate a notion of inquiry. So, when a student asks, is this right or wrong that to me is a kind of failure of communication. We really want students to be able to sort of investigate their own work. To be able to know that it's either appropriate or inappropriate. We ask students we don't tell students. We ask them why? How does this work? How can this work? How can this possibly be successful? That's the questions that we're underpinning by it. We push that in a multitude of different ways.</p>
Design thinking	<p>So, with regards to creativity, the question of creativity or not or how, we certainly examine in our tutorials weekly desk meetings in the studio, how a student can observe their own thinking, examine their own</p>

	assumptions. Examine their own thought process, thinking process, doing process, drawing process, to create something which is better in the end.
Challenges	From UK students that the studio is equivalent to having a lesson. I was mystified myself about this, and then I sort of did some research and found how a lot of UK students are educated. There's a great process of up to say year twelve, of formulaic education which isn't... which is result driven opposed to enquiry driven and so it... students become very used to having information given to them. Most of them have never been in that kind of environment and it's daunting, it's challenging, it's scary.

Appendices (12)

Coding and categorising students' definitions of creativity:

In the following tables, each table constitute of four main columns; students' code, creativity definition, extracted codes, and thematic categories.

Student	Definition	Code	Category
Ge.L	it is being able to	Person's ability	Person (ability)
	visually show your work	Visualisation	Physical process
	in a unique way,	Uniqueness	Product
	a creative innovative sort of way	Innovative way	Physical process
	that is presenting the work.	Presentation	Product
	Not having the ordinary day to day job.	Not ordinary	Reverse concept

Student code	Creativity definition	Code	Category
Ca.L	What pushes them to design	Motivation to design	Person
	an innovative design	Innovative	Product
	and things never been seen before	Original visual	Product
	it pushes to create	Motivation to create	Thinking process
	Unique	Uniqueness	Product
	new	Original	Product
	space	Object	Product

	that have not seen before.	New visual	Product
	depends on the function of the time,	Functionality	User centred
	change the space as people need	Efficiency	User centred
	function in that specific time.	Functionality	User centred
	So that is creative design for me!	Design	Product

Student code	Creativity definition	Code	Category
El.L	I don't know...maybe a lot of things	I do not know	Open ended
	unique or never seen before,	Uniqueness	Product
	adopting things seen before and making it new.	Reconstructing	Thinking process
	new.	Original	Product

Student code	Creativity definition	Code	Category
Je.L	Anything can be creative	Anything	Open ended
	I mean anyone can draw a picture, or pick something on it, or put something in it that could be different.	Drawing	Physical process
	But I think everyone have different tastes and different opinions and different ideas	Everyone	Open ended
	and there is no agreement on one thing	No agreement	Open ended
	but there is no specific category or character	No category	Open ended
	no specific category or character I can think of stands for being creative"	Thinking style	Thinking process

Student code	Creativity definition	Code	Category
Ja.L	A lot of things when I think about it!	Broad concept	Open ended
	The use of different materials, lighting, colours.	Visualisation	Physical process

Student code	Creativity definition	Code	Category
Gr.L	I mean fire!	Metaphor	Person
	I mean spark....	Inspiration	Thinking process
	Like it is something we think as innate within people.	Innate	Person (Innate)
	It is like an uncontrollable fire	Uncontrollable	Person (Innate)
	no matter how much water you thrown in you can't put it out.	Unstoppable	Person (Innate)
	Something which is in someone's soul.	inherent / born with	Person (Innate)
	It is inside you this is what creativity for me, something ...	intrinsic/ gifted	Person (Innate)
	You can entertain yourself in any situation;	Self-entertained	Person
	you can take inspiration from any situation, that's what creative mean!	Inspiration	Thinking process
	You have got this passion of	Passion	Person
	making things and analysing things.....	Making/ Analysing	Physical process

Student code	Creativity definition	Code	Category
Fr.L	Sort of creating	creating/ generating	Thinking process
	my own designs,	Personal design	Product
	whereas when you're using, like, CAD, it's so strict	CAD strictness	Reverse process

	when it's creative it's like you're putting your own input into it and that's better.	Personal design	Product
	Probably the way that I draw, sometimes	Drawing	Thinking process
	I do abstract visuals so,	Abstract visuals	Product
	you can make your own mind up.	Personal thinking	Thinking process
	Sort of creative in the way that I sort of put my ideas onto paper.	Transforming	Thinking process

Institution 2:

Student code	Creativity definition	Code	Category
Ag.G	Creativity <u>amazingly looking</u>	Amazing visual	Product
	<u>but also very practical</u>	Practical	User centred
	<u>and functional</u>	Functional	User centred

Student code	Creativity definition	Code	Category
Es.G	Adding in something that's not been done before or certain colours, certain looks.	Original visual	Product
	You're creating an experience	Experience	User centred
	that's not been yet seen.	Original/ Uniqueness	product
	You're thinking of something that's unique.	Uniqueness	Product

Student code	Creativity definition	Code	Category
Li.G	<u>It's making the balance between design and life.</u>	Balance	User centred
	I think it's humans who it's designed for. So it's through their eyes,	Human, taste, design	User centred

	so <u>how they experience their life.</u>	Personal experience	User centred
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Student code	Creativity definition	Code	Category
Ro.G	I suppose ideas that aren't the norm,	Original idea	Thinking process
	and pushing your ideas to their limits.	Cognitive progression	Thinking process
	Still being in the realm of practicality	Practicality	User centred
	but just being something you wouldn't have thought would work, but it somehow does work.	Cognitive progression	Thinking process
	And I feel like I could push myself to do that more so it's something I need to work on.	Personal motivation	Thinking process
	So be more imaginative	Imaginative	Person
	or just less predictable, unexpected, I suppose.	Unexpected	Product

Student code	Creativity definition	Code	Category
Vi.G	I guess just being expressive	Expressive	Person
	and seeing people's reaction to my art,	Reaction	User centred
	and making the environment I'm in more colourful and friendly	Personal motivation	Person
	environment I'm in more colourful and friendly	Aesthetic	Product
	because I feel I ...really enjoy	Personal motivation	Person
	making things inspiring to other people - their gloomy day, making it brighter, that kind of positive energy.	Inspiring	User centred

	Participating in the world, like giving a positive impact like every profession.	Personal motivation	Person
	If you're a doctor, you're not that creative, you follow strict rules of safety,	Following the rules	Reverse
	but in interior you can get loose, I guess!	Flexibility	Person

Student code	Creativity definition	Code	Category
St.G	<u>The more you can think</u>	Thinking	Thinking process
	<u>or imagine things!</u>	Imagining	Person

Student code	Creativity definition	Code	Category
Ma.G	<u>Creativity is something different</u>	Different	Product
	<u>and new!</u>	New	Product

Institution 3

Student code	Creativity definition	Code	Category
Lu.C	Creativity is <u>how you look at things.</u>	Personal ability	Person
	I really love like	Personal emotions	Person (feeling)
	messing about with little bits of nothingness	Hands on experience	Physical process
	and making it	Making	Physical process
	into something	Something	Product

Student code	Creativity definition	Code	Category
Ed.C	Creativity is kind of <u>a stubborn woman</u> , if you give her a lot of 'no's' she will be upset and she won't answer you anymore.	Metaphor	Person (Innate)

Student code	Creativity definition	Code	Category
Ji.C	Creativity for me <u>is to question the idea</u> ;	Questioning	Thinking process
	is it going to actually <u>work</u> in that situation?	practicality	User centred
	Is there any <u>value or benefit</u> from actually doing it?	Benefit	User centred
	Is it going to <u>improve</u> things?	Improve	Product

Student code	Creativity definition	Code	Category
Ri.C	Creativity is <u>out of the ordinary</u> .	Opposite to ordinary	Open concept

Student code	Creativity definition	Code	Category
Ma.C	It's different for everyone.	Different	Open ended
	You look at things differently,	Look differently	Thinking process
	to find something in a simple thing.	Finding	Thinking process

Student code	Creativity definition	Code	Category
An.C	Creativity is about <u>thinking outside of the box</u> ,	Outside the box	Thinking process
	and thinking from <u>different perspectives</u>	Different perspectives	Thinking process

	and using your <u>lateral and vertical thinking.</u>	Lateral thinking Vertical thinking	Thinking process
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Student code	Creativity definition	Code	Category
Be.C	Creativity for me <u>is inspiration</u>	Inspiration	Thinking process
	<u>and it's my idea of beauty...</u>	Beauty	Product
	And <u>when I'm in highly textured creative spaces,</u>	textured space	Product
	<u>in my brain there's lots of little sparks.</u> Like bling, bling, bling! Ideas.	Sparkling ideas	Thinking process
	It's being in interior spaces and <u>ask questions,</u>	Questioning	Thinking process
	as a creative person you have to ask questions.	Ask questions	Person

Student code	Creativity definition	Code	Category
Mi.C	Defining creativity is quite difficult.	Difficult to define	Open ended
	I think creativity for me <u>is new,</u>	New	Product
	<u>innovation,</u>	Innovation	Product
	<u>and possibly helpful.</u>	Helpful	Users centred
	Being creative is <u>how you fix this problem in a really clever way</u> that's creative.	Problem solving	Thinking process
	You could be creative even if you are scientist, it's not just art and design, it is to be creative with your problem.	Thinking ability	Thinking process

Student code	Creativity definition	Code	Category
Ta.C	Creativity is <u>something interesting.</u>	Interesting	Product
	<u>something new.</u>	New	Product
	<u>or something keep some feeling like impressive.</u> or something like that...	Impressive	Product

Appendix (13)

The Constructed Pedagogical Model

Learning style	MBTI	Student s' code	Six Thinking hats order					
1. Encourage their imagination. 2. Encourage them to exceed boundaries and limitations. 3. Let them think out loud without fear of being ridiculous. 4. Do not win all arguments. 5. Provide a friendly and caring environment to work in. 6. Try not quash their spontaneous preferences.	ENFP	Ag.G.						
1. Be direct and honest. 2. Be organised and logical 3. Show them their responsibilities with clear boundaries. 4. Encourage them to show their best and take the lead. 5. Share your plan and stick to it as much as possible. 6. May need help learning about tact.	ENTJ	St.G.						
1. Provide a practical and stable environment to work. 2. Provide a direct and organised course plan. 3. Allow responsibilities with clear boundaries. 4. They prefer honest feedback rather than false compliments. 5. Encourage their tact and teach them the value of it. 6. Follow time structure as much as possible.	ESTJ	Es.G.						
		Ca.L.						
		Ma.C.						
		Ri.C.						
1. Let them explore and be their adventurous best. 2. Show them how to do things practically, rather than verbally. 3. Provide rewards such as treats or social activities. 4. Emphasise experiential learning. 5. Clarify expectations and results. 6. Objective assessment methods are the most accurate.	ESTP	Fr.L.						

The individual Analysis of students from all data to triangulate my interpretation with

MBTI

(14) Introversion INtuitive Feeling Perceiving (INFP)				
Gr.L.				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	I mean fire! I mean spark...it is something which I think is innate within people. It is like an uncontrollable fire no matter how much water you throw in you can't put it out. Something which is within someone's soul. You can entertain yourself in any situation, you can take inspiration from any situation; you're creative. That's what 'creative' means to me! You've got this passion for making things of analysing things.	a. Conceptual, reflective and original b. Explore meanings and ideas c. Thoughtful and think outside the box d. Create variety of actions and ideas e. The biggest daydreamer among all other personality types f. Use imagination and creativity to solve problems g. Peace-maker in the group and idealistic	1. Introversion: I like to think the over and beyond of the place in the aesthetics 2. INtuitive passionate and caring: I think to be intuitive know these things gives your body of work the depth gives it as its constantly feeding it. 3. Feeling preference emotions and passion: I like interacting with people, I find people interesting. 4. Perceiving: spontaneous preference: someone puts me in a boat I don't want my time and	1. Introversion: She presented a unique project, as the brief indicated that the project is designing a cube. 2. INtuitive: She built a model of her design like a toy house rather than a CAD visual poster. She made human figures who are her favourite characters from the magazines, to represent the human element in the design. 3. Feeling: Interacting softly and in a friendly manner with her peers

		h. Caring, emotional and passionate i. Value people more than rules j. Work spontaneously, appreciate freedom and flexible k. Minimum or no rules is better.	my creativity to be cut mentally into week slots, that oppresses me.	and tutors. Quiet with little interaction in the group. 4. Perceiving: Frequent attendance to the studio and delay in her final submission.
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Student (1): Gr.L.

Gr.L's **MBTI results** and the following quotations from her answers to the test questions (which were stated in the methodology chapter) show that her personality type is INFP.

Her Introversion preference is reflected in several characteristics. For instance, her vivid imagination underpins how she can predict how things will look in reality and imagine the bigger picture. This cognitive ability makes her prefer daydreaming to making models. She indicated that her imagination is sometimes inspired by words and concepts which match the points (b) (c) and (f), that's why she is tempted to think and analyse using words, imagination and hands:

I like to do little models and I like to visualise things... but I don't always like to physically make a model because I've got a good imagination so I can imagine what it would physically will look like. But I also find it very beneficial to write things, I write blogs, I write a diary, I'm a rambler. I think both are important.

Moreover, she prefers working on her own and her justification is that design should be personal. She believes that a space or a design should have a personal touch to be more intimate and interesting:

I like to work on my own, not because I don't like the way people work or I can't work with other people. Just because I think I like things, what I have said all along, that are personal and I think it is very difficult to get a personal outcome from ten people. If they got to compromise somewhere, I want to design things that have no compromise. You know I want things to be as full as they can be... But at the same time, I like to talk about it with other people, I like to feed from other people's input.

She also indicated that changing the working areas and doing different physical activities such as walking is stimulating to her ideas. She stated:

I prefer to work at home! Here is not very relaxed, we've got these spiny chairs and all these computer hissing in the background. I like to do work and go and sit to myself, do work and go for a walk.

Her INtuitive preference is shown in the statement that she avoids working in a team as she would not be able to be herself and she will avoid conflicting with others even though her ideas got lost. She stated:

I want things to be as full as they can be. When you working in a team you always get someone quietly says what you think or someone who takes over, because it's just a nature of people. Whereas if you on your own you cannot say what you want to say, you can be wherever you want to be in your own.

Moreover, her natural tendency to be risky is considered as more evidence for her INtuitive preference. She stated; "I like to be as new and risky as possible".

Regarding her Feeling preference, it is reflected in the way she makes decisions following her heart. She used the example of drawing on CAD as a reverse approach of how her mind works, she stated:

I am definitely an emotional person. My mind works very organically, you know how it looks like how its feel. Where CAD is very mathematical very right or wrong and if you put in the wrong word or just slightly press the wrong button completely..... I don't know...

Finally, there is evidence from across the interview of her Perceiving personality. She likes to make things that she is enthusiastic about at the time. Also, she admitted that her time management skills are poor and she prefers to work spontaneously as in point (j). She stated that it is the area she will focus on later. She described it as:

I am an awful time manager...The main problem to me is time, you got a strict deadline and I've been over on this deadline by 12 hours. I can say that I am really rubbish at time planning. Every time I try like getting soon and I got all that in the beginning when we getting the brief and then because I have got this fluty analytical mind I will see some stars and I already started my final project because I got really passionate about it and it took time from this which is fun, but wrong!

The previous quotations are illustrated from the answers of the MBTI test questions. The following quotations from my **supplementary questions** are corroborated with the MBTI test which is the second aspect in the discussion.

For Introversion preference she indicated that people, rather than projects or tasks, are her focus. She sees people as the inspiration for her passion and the focus of her design, as in points (h) and (i). She stated:

I like interacting with people, I find people interesting and so I like looking at how people live and how to design the best design for people. So not just design because its designer, it is design because it is relevant to the client. That is what I wanted to do for interior design.

Interior design is something like a connection between your home your personal space ... I really like that.

From an Intuitive perspective, she likes to travel, daydream and be open and imaginative until she finds the inspiration in anything which matches point (e):

I am interested in everything so I like all the arts; I like films and I like traveling I like everything like I think to be intuitive knowing these things gives your body of work depth, as its constantly feeding it.

Moreover, she uses the brief as a guide and at the same time as a starting point for her imagination. She stated:

I always I read the brief, I think it is really important cause that is what's giving you marks, but then I also I read the brief and think what has to be done, then I also think ok I what am I not supposed to do, and what can I get away with, so I don't just want to do things by the book, I want to do things differently.

In the interview, she emphasised that she dreams of a space where people can enjoy themselves and that gives them a sense of their own identity. This idea came from her observations that people share the same objects and features. She thinks that there is a demand for designing places that accommodate personal aesthetics rather than designing a beautiful place. This is the general idea or the big picture that forms the basis of her designs and this is the goal that sparks her motivation.

I think so because otherwise all houses become like each other, all homes have Laura Ashley wallpaper. And I think it depresses people, you have lost your identity so it's something I want to bring back, my own little contribution.... I like to think over and beyond the place in the aesthetics, rather than whether I am going to use a 2mm screw or a 4 mm screw...

Moving to the Feeling preference, it is obvious that emotions and passions are her main driver and any thinking process will follow her emotions. She stated:

I want to do a degree I want to do it in something I have passion about, I wanted it to be something which interested me, and that 'something' for me was interior design... I am so self-motivated sometimes I can run away with myself... Self-satisfaction 100%

Even in educational performance, her Feeling preference appears in the learning and applying of Auto CAD programs. For her, it is a strict, rigid tool that restricts her creative outcomes. She imagines big ideas with details that are hard to draw on CAD

I have some great ideas sometimes but I don't know how to put them into CAD! So CAD is a big barrier for me, it takes me a long time to do simplest things. Because it's the way its constructed is not the way my mind works.

Finally, her explanation of her approach to accomplish projects shows the Perceiving preference as she does not like following a schedule.

I think I am a bit of an anarchist at heart and I think, if someone puts me in a boat I don't want my time and my creativity to be cut mentally into weeks slots, that oppresses me. I want to think flowing into this and I can take whatever I wanted...

Moreover, she confirmed that she cannot come to all the sessions in the studio, as she gets depressed when she keeps working in the same place. She likes to work in different places and get different inspiration:

But if you here all the time it can depress you a little bit... our course is separate from the main building, it's sometimes which I don't really like. I have got the feeling that we have a classroom and that's it. May be if we were in the main building I would be happy work here, because there are different areas you can go to, but here I am all the time on this chair on this desk, do you know what I mean? Different areas to stimulate you, here everything looks the same and everything has got lilac walls.

The third section, which is the second verification for the MBTI test results, is the corroboration **observations** and four attitudes and behaviours support the data from the interviews.

1. Introversion: She presented a unique project, as the brief indicated that the project was to design a cube. She decided to design 'a public place' rather than a 'space' for people using the cube shape in the brief. The cube was the restriction and her creativity was the tool to escape from it. Her main idea was to not keep the cube as a single unit, but to divide it into slices in a public park to be like a public museum. This idea shows high potential for creativity and taking risk to be different.
2. INTuitive: She built a model of her design like a toy house rather than a CAD visual poster. She made human figures who are her favourite characters from the magazines, to represents the human element in the design.
3. Feeling: Interacting softly and in a friendly manner with her peer and tutors. Quiet with little interactions in the group.
4. Perceiving: Frequent attendance to the studio and delay in her final submission.

The fourth aspect to discuss under Gr.L. is her order in the **Six Thinking Hats** activity, which is as follows:

1- Green: as soon I read the words in the brief I automatically create things and possibilities. I read cube then I immediately think what does 'cube' mean to me.

(Introversion)

2- Red: Then once I've got all these things I am like... ok how does this make me feel? And do I want the people to feel when they interact with this thing? Then the organic process in my mind and my feeling and all other things begin

(Feeling)

3- White: then I gather all information as much as I can, get in hands on and

(INtuitive)

4- Black: then I am ok so what going work with all this stuff, then I think that's going work and this does not work. That is not a negative black here, it's disregarding stuff that doesn't work.

(INtuitive)

5- Yellow: then I've been positive about what comes out of these possibilities.

(INtuitive)

6- Blue: then how I gonna manage my time, this is the last thing I think about when I have to really think about it in the beginning.

(Perceiving)

Finally, the fifth aspect is **her definition of creativity, which reflects** her personal, implicit understanding of the term. She indicated that it is a status that comes within a person:

"I mean fire! I mean spark... Like it is something we think of as innate within people. It is like an uncontrollable fire no matter how much water you thrown on, you can't put it out. Something which is in someone's soul. It is inside you this is what creativity for me. You can entertain yourself in any situation; you can take inspiration from any situation that is what creative means! You have got this passion of making things and analysing things..."

She used specific terms; "interest", "inspiration", "passion", "spark", "making" and "analysing", which emphasise the phases of her thinking process in the Six Thinking Hats order and the MBTI preferences. This evidence supports the relationship between her personality type and her implicit creative process.

Conclusion

This discussion of the five aspects analysed for one individual student shows a relationship between all five. Gr.L.'s MBTI test shows that she is INFP which reflects a set of characteristics and preferences. The supplementary questions also supported this finding by representing her preferences in a more general sense. Moreover, my observations of her attitude and behaviours show consistency with these findings. Her Six Thinking Hats shows a personal thinking style that also supports the personality type data.

Finally, her implicit definition of creativity represents her values and principles constructed by her as an individual. Her Introversion preference underpins her belief that creativity is "innate within people". Her INtuitive preference is shown in her statement, "something which is in someone's soul". Her Feeling preference appeared in the "passion of making things and analysing things". Her Perceiving preference is also demonstrated in her statement using metaphors: "it is like an uncontrollable fire".

(15) Extraversion Sensing Feeling Judging (ESFJ)				
Mi.C.				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	Creativity for me, is new, innovation and possibly helpful. Being creative is how you fix this problem in a really clever way. That is creative.	a. Prefer socialising and working in teams.	Extraversion: <i>I still prefer teamwork</i>	1. Extraversion: She prefers to come to the studio regularly to work on her project.
		b. Listen to others contributions.	Sensing: <i>I start from what I want to see.</i>	
		c. Identify clear idea and instruction of what is the task should be done.	Feeling: <i>I feel that designing is to either something new or improving.</i>	2. Sensing: She likes doing models and visualising her ideas using pictures.
		d. Relay on their senses to perceive information and take decisions.	Judging: <i>... when you're working in the real world it's always something gotta be finished.</i>	3. Feeling: She is very friendly with her peers and cares about others' feelings, even in giving feedback.
		e. Focus on people, values, morals and feelings.		
		f. Complete tasks.		
		g. Shows mature responsible attitudes and behaviour.		
		h. Deadline is a time		4. Judging: She makes a dated timetable for the activities

		management approach.		to be completed.
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Student 2 (Mi.C.).

The **MBTI** for Mi.C is ESFJ as shown in the table above and the results will follow. Her Extraversion preference is represented in her responses, as she prefer working in the studio with her peers:

I think working by myself is difficult, that's why I said working in a studio is quite helpful.

From this, it could be interpreted that working in studio is a preference that aims to avoid challenges, as she receives help and support while she is in the studio, from tutors, friends, facilitators and facilities, as will be explained later.

As Mi.C. is Sensing person she emphasised that she likes to think in a visual way; she even tried to imagine the professions of architecture and interior design visually. She attempted to identify an idea of what the interior design profession means for herself and she constructed criteria of what the task is and what should be done.

I like interior design, I mentioned architecture before and I also mentioned graphic design. But the thing is, graphic design is more 2D and architect is 3D isn't it. But interior design it kind of falls in between..... You also have this decorations bit, that can be like 2D.....colours and decorative parts of it...From the experience I find that interior design is a much wider range than what I knew before. More a thinking process.

Her explanation shows the image in her imagination that graphic design is two dimensions on the screen, whereas architecture is three dimensions of a building in reality. She placed

interior design in between, as it has some elements of designing a 3D space, while the colours and decorative details are 2D.

Her first statement “I like interior design” indicated that Mi.C is a Feeling personality, as she focuses on values, morals and feelings. In several places in her interview she stressed the importance of people. At a general level, she emphasised the value of people in the profession of interior design and how they should be the centre of the design process:

“I feel that designing is to either make something new or improving something. So, when you address the problems or when you address something that could be made better, that’s what design is.... it’s something to make human’s better.”

Her statement shows her personal perception that the interior design profession should be helpful and supportive for people and this is the value of practicing interior design in her opinion.

Interestingly, she stated that deadlines are something we need, in order to finish the work on time and move onto the next step. This tendency reflects her Judging preference and the following quotation shows how she make her time scale and gives herself enough time for unanticipated events:

Deadline for us as a designer, deadline for us mean when is the other going to start producing it... I do plan my time quite wisely... in bed, nearly fall asleep and then something just comes up in my mind, it’s like ‘I have to do it now’ [laughs] Otherwise I will forget. All these little details that just flash in, it’s just going to flash away, when I know that, that’s how I work, that’s how my brain is. That’s how my body works in a creative process, I often plan more time than I actually need. Cause I know that I am quite good at sketching. So I do it really quick, so that’s like, I know my strong and weak points... For example I’m not very good with AutoCAD....So, I would give it quite a bit of time.

Supplementary Questions

She responded to the question regarding the studio that she preferred teamwork and the studio atmosphere as it is helpful and supportive. This response indicates her Extraversion preference:

I still prefer teamwork... because when you work on a project that is quite big, you need a lot of opinions and idea and it's important to me to see what other people think of the project... I'm just one of those people who get bored really easily. I get tired of my idea. I don't know where to go, I don't know if it's good or if it's not. But when you get to talk to other people or other students in the same year, different years, younger or older.....everyone has different points of view. They have really good opinions, they can tell you what is a really strong process that you have and what doesn't quite work really well... When someone likes your project or when someone likes what you're doing you have this confidence to do it... Cause if you don't get any good feedback you maybe fall back... 'maybe this is not my thing' sort of type... when people say that 'oh, yeah, this is really good idea' or when you get positive feedback it makes you work harder 'cause you really want it to come out really well...

This explains the implied process behind her the overt behaviour while she is designing her project. She starts by listening to others' opinions and ideas to widen her perspective of the project brief. She stated clearly that she needs others to be motivated and to energise her, otherwise she will feel bored, lost and not progressing. She justified why it is important to exchange ideas and listen to others' thoughts, as she is getting a wide range of thinking processes and ideas and the positive feedback about her work is motivating and feeds her confidence. Whereas, the negative feedback is considered as an early warning and a sign to change or develop her ideas or design. In other words, it is a crucial step for her to gain confidence and motivation that keeps her moving in the right direction.

Mi.C takes her information through listening to her peers and designing her projects based on their comments and feedback, which emphasis the fact that she is a Sensing person. Moreover, she generally relies on her senses to perceive information and make decisions. She explained that she gathers pictures to inspire her to think and create ideas:

[I] start my project by gathering pictures, looking at the theme. Like, the concept as like the first thing that comes to my mind about what do I want to see. I start

from what I want to see...So coming to why I have that picture in my mind. But then, that picture is never going to be used. It's just going to be like a starting point of what I was going to have. And so I work backward and see what the theme of that room is and work from there.

Even though she is not using these pictures identically and not using this exact idea, it is a departure point for her mind to generate creative ideas.

The Feeling preference was demonstrated in Mi.C.'s answer to the question 'how you see yourself in the future?':

I would try to apply the interior design knowledge that I have to whatever I have to do in future.... I have my mum back in Thailand. She has a company which is designing fabrics....and a factory and we also do sorts of, exhibitions and things...But then I also need to do, sort of business, maybe, import, export things, that could be linked to product design. So, because in Thailand we have got a lot of amazing wood and materials and they're quite, you know, this is like the supply we have and we'll be able to send them to other country, they can be really... make a lot of money for that.

Her answer shows her personal values: her mother, the family business and natural resources in her country and how she wants to support them. She is not only thinking of what she likes to do, she is thinking of her individual responsibility to her family, community and society.

The final character in Mi.C.'s personality type is Judging, which is about completing tasks by following a structure and a schedule to achieve clear outcomes, points (h). She described in details how she personally accomplishes her work, plans her tasks and manages her time.

She stated that deadlines are not stressful; it motivates her to finish her work. She even stated that she gives herself timeslots to play with ideas, as it is an important phase in developing creative ideas:

Scheduling... I often use a lot of time to do research and coming up with the original idea, for example, the project that I'm doing, I've got about six ideas and then sort of pick out what is speaking to me from this object...It's also when you see something that others don't see, that's quite fun, as the quality of a being designer is to see simple things that other people just don't... when you're working in the real world it's always something has got to be finished. There's always a deadline for it.

This explanation makes it obvious how she prefers the Judging attitude in life. She embodies the deadline idea and prepare herself well to finish and submit her project on time, (f) and (h). She knows her strengths and weaknesses and gives herself time to play and be inspired. She wants to be organised and careful, which drives her to be conventional and avoid any risks. Thus, she eliminates any actions or behaviours that could hinder her goal of successfully graduating. Finally, she revealed that the tragedy of her father's sudden death contributed to her early maturity and shaped her personality preferences.

From my **observation**

1. Extraversion: Mi.C. used to come to the studio quite often (2-3 times a week), despite the fact that studio time for her year level is once a week. As she prefers to work in the studio on her project, she also engages with other students across all year levels in different conversations.
2. Sensing: She likes making models and visualises her ideas using pictures from the early stages in her design processes to the end.
3. Feeling: She is very friendly with her peers and tutors and cares about others' feelings. When she gives feedback to someone she uses soft words so as to not hurt their feelings and she feels disappointed when she receives criticism.
4. Judging: She started the project by making a dated timetable for the task to be completed. She gave herself enough time for each phase or activity and she set a clear finishing line for her project.

The Six Thinking Hats

- 1- White: This is like information available, sort of basic knowledge that from the project. So, I can get down to what I actually need to do further research on. (Extraversion)
- 2- Blue: I would say thinking process, at the same time with (Judging)
- 3- Black: Because you need to think about what's your limit. It would make more sense to me. (Sensing)

- 4- Green and,
- 5- Yellow: What do they mean by value and benefits, to the project as well. (Sensing)
- 6- Red: Like how do I feel about the project? (Feeling)

Finally, discussing the **definition of creativity** as the fifth aspect, which reflects her personal, implicit understanding of the term, Mi.C presented her **understanding of creativity** as:

Creativity for me, is new, innovation and possibly helpful. Being creative is how you fix this problem in a really clever way. That is creative.

The interpretation of her definition suggests that creativity is solving problems in an innovative way that generates helpful solutions. This definition reflects the preferences of MBTI code and the Six Thinking Hats order. The terms 'innovation' 'solving problems' and 'helpful' reveal her personality type ESFJ that show her aim to be a contributor (E), to solving problems (J) and being helpful (F) by producing innovation (S).

Conclusion

This correlated discussion of the five aspects of analysis for one individual student shows a significant relationship between the five aspects. As Mi.C.'s MBTI test shows that she is ESFJ. My supplementary questions and observations show consistency in these findings. Her Six Thinking Hats shows her personal thinking style and supports the personality type data.

Finally, her implicit values and principles are reflected in her implicit meaning of creativity. Extraversion is represented in her aim to be effective and take an action. Her Sensing preference is shown in her tendency to have tangible objectives. Her Feeling preference is stated in her focus and caring about being helpful to people. Finally, Judging is represented in finishing the task by solving a problem.

(16) (ESTJ) Extraversion Sensing Thinking Judging				
Ca. L				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	What pushes to design an innovative design and things that never been seen before [I]t push to create unique new space that have not seen before. So it depends on the function of the time, they can change the space as people's need the function in that specific time.	a. Prefer talking and socialising	Extraversion: We have done team work projects before and I have enjoyed them	Extraversion: He likes to work in the studio and socialise with his peers.
		b. Working in teams in an active environment.	Sensing: I really like doing 3D models virtual	Sensing: He likes building models and working on CAD as part of the thinking process.
		c. Confident, assertive and natural leaders.	Thinking: and I choose to specialise in 3D objects and spatial design	Thinking: Talkative and active in the studio and in teamwork and gives his opinions confidentially.
		d. Practical and realistic.	Judging: In the studio for working atmosphere	Judging: Studio is the working environment and home for relaxing.
		e. Rational thinker, task-oriented.		Working with timetables to submit the project on time.
		f. Hard worker and problem solver.		
		g. Appears as a mature person from an early age.		
		h. Organised and works following a structure.		
		i. Works toward clear expectations to meet known deadlines.		

Student 3 is Ca.L.

Ca.L. is a student from the first institution. His **MBTI test** results shows that he is ESTJ person. His Extraversion preference is reflected in his preference for working in teams and discussing projects with others, which gives him insight. He considered it a positive experience:

The idea of working with a team is good and I have been a team leader in some projects before and I kind of organised what rules people will take in a design process. I am motivated and then maybe if I am doubting my design at some point...maybe I need a push when someone tells me you can create something better than that.

This emphasises his personal preference for working in a team and he finds it helpful in stimulating the cognitive process. It shows significant matching with point (b) in the table which reflects the Extraversion personality preference. Besides, his success in leading teamwork is in improving the self-assurance and confidence emotional state towards his own ideas or designs. This tendency for leadership and the collective spirit of teamwork matches the character (c) in the table.

Moreover, his Sensing preference is clear from his following statement, as he emphasises the importance of visualising his ideas:

I think visualising in a 3D form is really important and I mean it's harder to visualise it in your mind than visualise it in 3D visual format.

This provides lots of visuals that inspired him to generate more ideas and evaluate his designs as well.

Ca.L. is a Thinking person, he uses thinking processes to make rational decisions. This practical characteristic matches point (e) in the table. His rational thinking is clear in several aspects, such as in risk-taking when his statement reflects early maturity in point (g):

I would like to take a risk but I suppose in real world design it is hard to take a risk, it depends on the project you are doing as well if it's a high risk or low risk.....i.e. I think both to keep up to date with emerging technologies because we got to move with the time I suppose.

He would like to take risks and is encouraged to do so, but his rational thinking style prevents him from doing so unless he is sure that this idea will bring great results.

Finally, his Judging preference represented in setting a time plan and working following a structure which matches point (h). In his statement he stressed the significance of working to a time scale:

It is important to follow a structure plan, so you set a date where you want to achieve something by evaluating yourself and say if you would achieved it by that date or not. So, I think yes I am following a structured plan.

Furthermore, he emphasised the importance of having a clear deadline, to finish and accomplish objectives, which matches point (i):

I do think a deadline is important...I can be happy working with my idea. But I also think I could just carry on that project for another four or five months keep adding bits to it modifying it.

The previous quotations illustrated from the answers of the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test, which is the second aspect in the discussion.

The Extraversion preference appeared in his description of teamwork in the studio:

We have done team work projects before and I have enjoyed them and I am quite a vocal person and I do like doing presentation and so in that situation when you get to talk to each other a lot about your ideas and you think your ideas will works well.

His Sensing preference is shown in his response about skills and interests. He emphasised that he likes working on AutoCAD and building models:

I really like doing 3D models virtual ones in the computer or actual solid 3D models to visualise the space as a starting point to our project and this really helps to visualise the amount of space you have got to work.

Regarding his Thinking preference, from his interview and observations he shows a good ability to think and make rational decisions based on his personal experience. For example, he was not sure what to study until he decided to take the art and design foundation program

and got a sense of all design disciplines. After that, he decided to study 3D and spatial design that influence people's lives:

I did a foundation year, after my A level I wasn't sure to what I am going to in the foundation year. You can have a taste of different aspects of design from fashion to graphic design and 3D design and I choose to specialise in 3D objects and spatial design. In that respect of interior spaces and how spaces can influence people in everyday lives.

As he experienced different design aspects and he chose 3D design based on the value and rational of influencing people's life.

Finally, the Judging preference is stated when he explains how he prefers to work in the studio and relax at home, which works better for his state of mind:

In the studio is a working atmosphere even if there are no students in the studio, when I am home I rely on being home relaxing and socialising and I quite liking to keep it like that.

The third aspect in the discussion is from **my observations**, which will be discussed in regard of each personality code.

Extraversion: Ca.L likes to work in the studio as much as possible and he is a very sociable person with his peers and tutors.

Sensing: Ca.L uses hands-on activities as he likes building models and work on CAD, for him it is part of his thinking process and stimulates his cognitive ability.

Thinking: Ca.L is a talkative person, active in the studio and teamwork and is able to give his opinions confidently and take criticism well. He shows high engagement with the learning process.

Judging: Ca.L Judging preference is reflected in his attitude and behaviours in the studio. He perceives the studio as a working environment, and home as a relaxing place. Working with timetables and following structures is good and submitting the project on time is an excellent achievement and successful target.

The Six Thinking Hats

White: Collect data and information as wide as possible until I create an idea
(Extraversion).

Blue: Organise my time and my activities for the project and what should be done till the deadline and the final submission (Judging)

Red: Start having my emotions about the research to decide which is the favourable ideas and my interpretation of these ideas (Thinking).

Green: Thinking in this stage I will have a set of ideas and I will be able to see positives and negatives of each design,

Black: The negatives more critical as it can take the quality of the design down if it has not been considered (Thinking).

Yellow: Test my ideas to check if this design or idea work visually and practically
(Sensing).

Regarding the creativity definition, Ca.L. expressed his implicit meaning of creativity as:

What pushes them to design an innovative design and things that have never been seen before, it's a push to create a unique new space that has not seen before.

His definition shows his understanding of creativity as a responsive process generated by challenges. This inner motivation pushes the person to exceed everyday limitations and produce something beyond expectations. He justified this tendency by expressing his own strategy to generate ideas and think creatively because of his own challenges:

"one of my weaknesses is dyslexia, so I struggle with writing elements and reading elements, the way to think and finding the problem and solving it... one of the aspects often with dyslexic people is problem solving... So the way they are trying to solve problems is often very creative. I was told in the way I have to think about the problem is quite innovative and creative in problem solving"

It is thus clear that he has self confidence and is a creative person, and he indicated the type of creativity he has as well. He clarified his cognitive process and the concept of creativity, based on experience and creating a personal dynamic.

Conclusion

Ca.L. was the example of the **ESTJ** personality type, which has been verified by five perspectives. The MBTI test result shows that he has a set of characteristics and features and his responses to the supplementary questions matching these characteristics, followed by my observations, which are consistent with these findings.

The Six Thinking Hats order represented his cognitive processes, including his personal progression of creative thinking. It also responded to the four preferences of his personality type in relation to the personal opinions and his thinking process.

The creativity definition emphasised everything that came earlier and revealed how he constructed his own meaning and activity that show creativity. It also shows how personal experiences contribute to the construction of meanings and behaviours.

(17) Extraversion Sensing Thinking Perceiving (ESTP)				
Fr.L				
Six Thinkin g Hats	Creativity definition	MBTI personality type	Supplementar y questions	Observations of behaviours and attitudes
	Sort of creating my own designs, probably the way that I draw, sometimes I do abstract visuals so and you can make your own mind up. Sort of creative in the way that I sort of put my ideas into a paper.	a. Energetic, pragmatic, talkative and decisive.	Extraversion: I seem to get on better with my work when I'm in a working environment with other people.	Extraversion: Fr.L is sociable and gregarious.
		b. Improvise and innovate.		Sensing: Sketching and drawing most of the time in the studio.
		c. Task oriented, hard worker and fun seekers.		Thinking: give and take feedback quite easily.
		d. Minimum rules, experience leads to learning.	Sensing: I didn't think I would have to do, especially certain parts of CAD.	Perceiving: Mostly working at home or in quiet spaces, she spends short time of the studio hours.
		e. Rewards is motivating.	Thinking: They're not clear because they're so broad	
		f. Their confidence often comes from learning new and practical skills.	Perceiving: I think it's quite a good working space.	

Student 4 is Fr.L.

MBTI test

In general, Fr.L. is a sociable, talkative student who likes to be involved in social activities in the studio. This Extraversion personality matches point (a) in the table.

Moreover, her preference for the working environment emphasises her Extraversion preference as well:

Probably in the studio, because it's comfortable but it's a working space. And for me that helps. When I'm at home, like home it's too comfortable and there's too many distractions as well.

Her Sensing preference is shown she emphasised the importance of details even though it is challenging:

Details...the architectural side is a challenge for me, using CAD especially detailing.

She explained that more hands-on activities suit her learning style and stated frankly that practicing is developing her skill and improving her self-confidence:

Lots of practice on CAD. I've just developed and progressed on... through practice. Now I feel a lot more confident...

Moreover, Fr.L focuses on tangible objects like drawing, which reflects her **Sensing** preference, as she emphasised her visual tendency:

I take in images rather than words sometimes. So seeing something and having it in my memory is probably better than reading something for me.

Moving to the Thinking preference, Fr.L follows her head and tries to make logical decisions. In her design process, she considers her tutors' reflections as she admires their experience:

I think probably both. I do care what they think. As well as, I'm proud of my own work. Because they're experienced and I'm not. I'm pretty confident to show them. Because I'd rather if they think it's rubbish or it's not going to work, I'd rather them tell me before I go on with it. So yeah, I'm fine with any criticism

Lastly, she explained that she prefers working at home Spontaneously and that deadlines put pressure on her. At the same time, they motivate her to work harder, which reflects the **Perceiving** preference. Thus, as a Perceiving personality she prefers working alone but developed a personal value for working harder to finish her work and submit her project:

I prefer to be free... I'd probably say both. It motivates me when the deadline is closer. I get more motivated to do work, but at the same time, I probably get

quite stressed as well. It's just added pressure but then that makes me work harder and move on.

This illustrates the answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test, which is the second aspect in the discussion.

Her Extraversion preference shown in her tendency to work better in the studio:

I seem to get on better with my work when I'm in a working environment with other people.

Regarding her Sensing personality, she described CAD drawing as enjoyable despite the fact it is the most challenge for her:

Really difficult in parts... I've come across things I didn't think I would have to do, especially certain parts of CAD. Things like, more architectural than I thought...But that doesn't mean to say that I haven't enjoyed it. And quite surprising I would say...very challenging, yeah but I don't like it when it's easy. So, it's been challenging for me but I've enjoyed it, yeah.

Her Thinking preference, which reflects her thinking process and how she makes decisions and designs her projects. She said that the project brief is usually not clear for her and she needs to think, analyse, understand, narrow down what she wants to do and figure out the project:

They're not clear because they're so broad, in the design. But then that's kind of my job to narrow it down and make my own interpretation of it. So they are quite, at first it's really broad and really hard to understand. But I think that's the whole point... as designers you're not restricted, especially when you're studying...But it can be quite confusing.

Regarding the Perceiving preference, Fr.L stated that one of the positives in the studio environment is having quiet areas when you need to be alone:

This space particularly I'd say it's good because there are areas you can go to that are quiet if you want it quiet. If you want to be with people to ask them questions and, about anything that you don't already know about you can spend time with other students and then the teachers are here quite a lot. But there are spaces in this building where you can go to be alone. So I think it's quite a good working space. There's a lot to work with.

The third aspect is **my observations** of how Fr.L behaved and what kind of attitudes.

Extraversion: Fr.L is a sociable and gregarious student who takes part in fun, lively discussions.

Sensing: Despite the fact that Fr.L does not stay in the studio all day, she likes sketching and drawing while she is talking and laughing.

Thinking: She appreciates regular feedback and interprets it as allowing her to relax because she knows that she is on track. She gives feedback to others quite easily.

Perceiving: Mostly working at home and she likes working in quiet spaces in the studio when she is in the thinking process. She spends a few hours in the studio out of the full day.

In regard to **the Six Thinking Hats** Fr.L ordered the hats with smooth logical explanation, the she stated "*I've never asked myself those questions before*". *Her explanation as following:*

White: probably gathering the information, primary secondary research, I wondered what everybody else did (Extraversion).

Blue: Then, managing and thinking. So, a thinking process with that information (Thinking).

Yellow: I would definitely go onto the good things about it why it is going to work or might work (Thinking).

Red: I would start, when it says individual feelings and hunches, I look at that as saying something like, it might not be beneficial (Perceiving).

Black: you obviously get your cautions and difficulties at some point I think, along, towards the end of a project (Sensing).

Green: then, alternatives and creative ideas, which would be, me finding alternatives to what went wrong (Thinking).

Her definition of creativity is:

“Sort of creating my own designs, probably the way that I draw, sometimes I do abstract visuals so and you can make your own mind up. Sort of creative in the way that I sort of put my ideas onto paper”.

This definition reflects her multiple implicit meanings of creativity: her personal involvement in the design, the way she uses drawing as a tool or a skill, which reflects her Sensing preference, and transforming her design ideas into a visible form or product which indicates her (Thinking) preference. These three perspectives are centralised around creating a visual that represent her own uniqueness and her creative designs.

Conclusion

To sum up **Fr.L.**, the demonstration example to discuss **ESTP** personality type has been verified from five different perspectives. The MBTI test result shows that she has a set of characteristics and features that match the supplementary questions. The data collected from my observations also match these characteristics. The Six Thinking Hats order shows the strong appeal of the cognitive process which emphasises the Thinking preference and leads to logical creative thinking.

Fr.L.’s creativity definition emphasised the same themes that appeared in the earlier aspects, which stress the notion that individual students have their own understandings and implicit meanings of the term, which leads to different outer outcomes for them.

(18) Introversion INtuitive Feeling Judging (INFJ)				
Lu.C				
Six Thinkin g Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	Creativity is how you look at things. I really love like messing about with little bits of nothingness and making it into something.	b. Calm, imaginative and creative.	Introversion: Interior design can be in anything	Introversion: She thinks and reflects on matters in an imaginative way;
		c. Intuitive and follow their hearts to make decisions or take action.	INTuitive: I just think you've got to be passionate about what you're doing	she might go for a walk during studio time to think and come back with ideas.
		d. Explore my own beliefs, ideas, values and meanings.	Feeling: On my own!	INTuitive: Her emotions and feelings draw her attention towards interesting possibilities.
		e. Sensitive, emotional, dreamer and deep.	Judging: I've noticed that I do work a lot better under pressure	Feeling: she follows her heart and deals with her peers in a caring and friendly manner.
		f. Work autonomously within a cooperative environment		Judging: she is very active especially towards the end of the project.
		g. Organise my own time to achieve my own vision.		

Student 5 is Lu.C.

Lu.C is a student from the third institution; her **MBTI test** results shows interesting findings.

Regarding her Introversion preference, she emphasised that she would prefer working solely from home to focus better and produce more. This characteristic reflects point (d):

At home. I find in the studio I don't know what it is, but I tend to do less, a lot less here than I do at home in my own, like, office thing.

Furthermore, her INtuitive preference appeared when she described her thinking process. She stated in her interview that she gave herself two to three weeks to play and imagine ideas and thoughts related to her project. After that, she created a mind map that links all ideas and information together and then follows her intuition to make a decision:

Really, really inspiring... Not just being in C. [the name of the city] but, the tutors that you've got. The environment of the studio. The material that we're told to look up with regards to books and stuff you know. Walking round you get, constantly all the time thinking about work you know. Where can I push my ideas? What can I be doing and stuff. Which is the most I've been inspired on any course or any kind of thing that I've done in my life before I would say.

These design steps reflect her INtuitive preference and points (b) and (e) in the table.

Moving to her Feeling preference, she stated that her inspiration drives her to take risky decisions, even if it does not seem logical or well considered, her challenge is to make it work:

Take a risk. Definitely take a risk but then, I always have a problem of how it would actually work in reality. But yeah, I like being flamboyant with my ideas.

Finally, her Judging preference shows an interesting attitude, as she has her own strategies to balance her structure and spontaneous characteristics. She indicated that she likes to follow structure:

Structured plan! Definitely, definitely. Not like structured plan like, ok you need to have this done by this. But like, the books that we get and we're given each week... so you could be looking at this now you could be looking at this. I like having some form of backbone or structure that I can be working on.

It is not a detailed plan; it is just a clear milestone strategy. The following statement shows that she stopped working after two and a half years because she lost the interest and clarity in what she was doing. It shows that being in a vague situation leads her to lose interest:

I lost interest into the second year because I felt like it was very vague. I didn't feel like it was structured... I didn't know what I wanted to do after it. It wasn't giving me any kind of thoughts of to where this could take me.

These two statements are corroborated by her answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test.

Lu.C. lives in an inner world that exist in her imagination, where she constructs personal values, meanings and reflections. Usually, her ideas are the result of a long process of reflection, which mirrors the Introversi preference. For example, she looked at interior design after studying fine art and analysed the differences between the two disciplines:

I did a degree in fine art, but it's a very broad subject and I was looking into different ways of applying my work... I started looking into interior design and I thought it's a lot more of a structured way of looking at... I thought there's a lot more career paths with it. It's not a very vague subject, there's a lot of different trades and jobs that you can go into after interior design... Well I see it differently to how I first thought, since starting the course. Interior design can be in anything, it can be sculptural, can be retail based, theatre based, television based, window dressing, lighting design.

The second preference is Intuition; she stated one concept generates the passion that keeps her motivated and pushes herself to generate ideas that exceed her boundaries:

I get an idea or I have like four different concepts but there's the one that keeps me going with research and keeps me going deeper and deeper into what it could be...the creative standard of the idea, I guess... I just think you've got to be passionate about what you're doing. Passionate about how much you've pushed yourself into what this could be rather than squash your ideas or squash your thoughts because of the surroundings that you've been given.

Her Feeling preference appears in her explanation of the learning process. She differentiates the environment (being alone or with others) from presenting her project (explaining her ideas in front of others):

On my own, up until about a week ago, until I started getting with one of the groups on design for the screen. Now I feel like I'm learning quite a bit off the other students which before I was getting quite ratty...I don't mind showing my

work. What I have a problem with is speaking about it. Like, if I've got a crit or something I'll have specific bullet points that I'll need to say with it. But if someone asks me a question then I tend to waffle, I'm not able, I find it hard to pin point what I'm trying to get across. Like, it's perfectly clear in my head but what comes out, sometimes goes off on a tangent.

The following explanation shows her personal approach to creating a balanced strategy between time structures and being free and flexible, representing her Judging personality:

I have a tendency to do loads of research and get loads of images and loads of stuff together, but I never start applying pen to paper until later on which I really need to change. Because I give myself two three weeks before the hand in and it's just like twenty-four hours, twelve hours, just straight doing it. But I've noticed that I do work a lot better under pressure. I don't work well when I've got a big time to fill. I end up just not, just kind of meandering and doing other things and thinking, 'oh well I've got so long to do it'

I'm constantly doing work, but I have a tendency to stay at the concept and the design stage of what could it be. Could it be this and like, I keep myself there for quite a long time rather than getting something nailed in the first week or so and then progressing onto 'how will this actually work'. Materials and stuff. Because that is always something that's put on the backburner. But again, I think that's just because of the skills, I'm not as confident at like the building materials or the digital media, so I will stay where I'm most comfortable... but because my digital skills aren't up there I'll tend to bring my design down, so I'm able to do it and create it digitally... I'm so much more comfortable hand drawing all my floor plans and my elevations and stuff, but everything's digital now. I think to get a job or to get a career going I think I need to be a lot quicker at my technical stuff.

She demonstrates a balanced attitude towards deadlines.

My Observations

Introversion: She thinks and reflects on matters in an imaginative way, she might go for a walk during studio time to think and come back with ideas.

INtuitive: Her emotions and feelings draw her attention towards interesting possibilities.

Feeling: She follows her heart and deals with her peers in a caring and friendly manner.

Judging: She is very active, especially towards the end of the project.

The Six Thinking Hats

Red: concept, playing with what the concept could be (Introversion).

Green: Pushing it, seeing what else it could be (INtuitive).

Blue: Still working out, well, sketches and thinking and doing little models and stuff (Judging).

White: More research (Introversion).

Yellow: Working out how, if this could be actually made into a reality (Judging).

Black: Then, panic about the things that might go wrong at the end (Feeling).

Moreover, she **defined creativity** as:

Creativity is how you look at things... I really love like messing about with little bits of nothingness and making it into something.

Her definition reflects her unique, implicit meaning as a spontaneous attempt to create something out of nothing. It shows how the person's ability to perceive things differently can lead to creative outcomes and how a person can add value into invaluable and transform problems into great potentials.

Conclusion

This section has discussed Lu.C as an example of **INFJ** personality type and it has been verified by the same five different perspectives stated in the introduction. The **MBTI test** result shows that she has a set of characteristics and features matching the supplementary questions and my observations. The **Six Thinking Hats** reflect her cognitive process, which emphasise the notion that each person constructs their own thinking process.

The **creativity definition** stated by Lu.C emphasised her idea of adding value by trying and being flexible, opening your eyes and your thoughts to see obvious potentials and links lost in the ordinariness. Apples keep falling but Newton first hypothesised gravity!

(19) Introversion INtuition Thinking Perceiving (INTP)				
Ma.G.				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	Creativity is something different and new!	b. Theoretical, quiet and observer.	Introversion: I just prefer to work on my own	Introversion: She sits quietly and alert in the studio,
		c. Deep analyser and good listener.	Intuition: it is started off and brain stormed	observing the situation.
		d. Inventor original, ideas and mentally quick.	Thinking: I wanted to do and stay in the creative industry that would bring you a better future	Intuition: she presented her project as a day story of the users of the designed space.
		e. Curious, drive, complex, independent and visionary.	Perceiving: I need a clear image in my head and then go build it and make it	Thinking: she always justifies her actions and decisions logically and objectively.
		f. Works best with minimum people, rules and supervision.		Perceiving: Mostly works on her own, cannot follow a structured plan.

Student 6 is Ma.G

Ma.G is a student from the second institution. Her **MBTI** test results show that she is **INTP**. Her Introversion preference is reflected in her analysis of working alone or in a group, which matches point (b). Her point of view is that working in harmony in a group will lead to good designs, but being in a competitive group does not work well:

I think I really enjoying working in groups (two or three maybe) and choosing the group. Because you know people you work with them better. Otherwise it's head butting no matter how good the other person. Head butting just because you do not like him or her, so it does not work... some people are so closed and don't share their ideas, so why I should do it with them!

Interestingly, even her INTuitive preference was reflected in the tendency to think and imagine ideas more than visualise them. This is a clear difference between her INTuitive and Sensing preferences to tend to visualise ideas. Regarding her thinking process, she stated:

I have like intellectual thinking and I realised that I did not put anything in visual plans and I put my time management is sort of off, but I am working on that. So I am trying to build stuff earlier and I am a little annoyed and it's hard for my thinking as when I build something up and visualise. It is really hard for me to visualise it in different way or modify it.

Nonetheless, she indicated that she has the ability to criticise any place, as she recommends changes to enhance the quality of any visited space. It is sometimes critical to criticise places you are not responsible for. However, her focus is on the functionality of the space, more than people's feelings in this place, which reflect her Thinking preference:

I am thinking critical as I criticise a lot of things quite often and when I go like to an interior and they are not really matching their use, as if you work it yourself you will think it does make sense and it works properly.

Ma.G.'s Perceiving preference was stated frankly in her tendency to being unable to work following a structured plan as she needs a long time to think, analyse and

imagine all ideas before she can work continuously until she finishes, even working to the last minute. She described her planning process as:

I always tried to work to a plan but it never works out, never! I never stick to a schedule, it is good to know the schedule but I never stick to it...in the end I panic and I work harder... I could never work before deadline... of course deadlines stimulate me.

The previous quotations illustrate her answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test.

Ma.G reflects her Introversion personality in working at home more than working in the studio to minimise the social interference and distractions:

I just prefer to work on my own and go away from all the people in the studio and this is what I have to do and this is how I will do it... it is helpful in the beginning of the project when you start getting your ideas and talk to people about it, all the energy in this place to see everyone working on together and sort of different to think that works better. But by the end I know what I am doing, it is just I find it frustrating to be in here. So many people doing so many things and I start like thinking should I do that, should I be doing thi,s or should I be doing something else..... Too much information coming in and hitting your head and sometimes you want to do it in a specific way!

From another perspective, her Intuitive preference is reflected in her explanation of the process of working on her project as she thinks and brainstorms until she gets inspiration:

I just do, it starts off and I brainstorm and try to think of ideas and drawing them down...and it is wider, not as deep always until I find my idea. Then I start thinking of the layout of the plan and so ... the project usually takes four weeks and until the last week I start to get the visuals done, because I don't like to start the visuals until I have really clear ideas in my head.

Moving to the Thinking preference, in the following quotation she provides an explanation of the thinking process throughout her design projects. She described the thinking process, from the concept to the application:

But in the beginning, it is thinking and thinking and thinking and then searching and writing down and maybe sketching...So I do all the thinking and drawing by hand then start to put them in CAD, because I am much more comfortable about working with my hands, the computer actually scares me.

Another statement revealed her tendency to the Thinking preference. When she realised her artistic talent, she chose interior design as a career to be in the creative industry. This logical thinking shows her thoughtful decision making:

I was always artsy and did art in schools and I wanted to do and stay in the creative industry that would bring you a better future than fine art

As she is a Perceiving personality, she stated that she likes to take her time in thinking before starting any modelling work or drawings. She likes to be sure about her ideas before making them visible.

I don't like playing with the visuals, like doing them and changing things and make amendments, that's frustrate me! So I need a clear image in my head and then go build it and make it.

The following is the third discussion aspect: **my observations.**

Introversion: Ma.G comes to studio and acts quietly while observing the situation alertly.

INtuition: she presented her project as a day story of the users while they are using the designed space.

Thinking: she always justifies her actions and decisions logically and objectively in the critical reviews sessions.

Perceiving: She mostly works on her own to imagine and think critically of her designs and she cannot follow a structured plan, despite her attempts to do so.

The Six Thinking Hats:

White: Brief Information (Introversion).

Blue: Schedule thinking sketching (Perceiving).

Black: Restriction in the brief (Thinking).

Yellow: Consider ideas and looking at different things (Introversion)

Green: Working on problems (Thinking).

Red: I feel what is really right (INTuitive).

Creativity Definition

Her definition of creativity is “something different and new!” which reflects her specific understanding of creativity, which simply focuses on two basic characteristics of an object (‘different’ and ‘new’). In her explanation, she clarified that she takes a long time searching and imagining different ideas until she finds something that she is fully satisfied with. She emphasised that being different from her peers is necessary as she likes to bring out an impressive, unique design.

Conclusion

Ma.G was the only example for INTP personality type and this has been verified from the five different perspectives stated in the introduction. The **MBTI** test result shows that her set of characteristics and features matches my observations and the supplementary questions.

The **Six Thinking Hats** briefly described her personal thinking process, which seems to be a mixture of logic, imagination and spontaneous planning.

The **creativity definition** stated by Ma.G emphasised her focus on producing an object that is new and different. She seeks unique individuality through designing impressive objects and believes that she has the abilities to do so successfully.

(20) Introversion Sensing Thinking Perceiving (ISTP)				
Ro.G				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	I suppose ideas that aren't the norm and pushing your ideas to their limits. Still being in the realm of practicality but just being something you wouldn't have thought would work, but it somehow does work. And I feel like I could push myself to do that more so it's something I need to work on. So be more imaginative or just less predictable, unexpected.	b. Enjoy privacy and very individualistic. c. Practical and mastering skills my way. d. Imaginative problem solver. e. Realistic, observer, analyser, f. Avoid sentimentality g. Performer, trouble-shooter, h. Work best with minimum rules and supervision. i. Flexible, competitive and stimulating.	Introversion: I just get nervous in front of groups of people Sensing: I want a visual image of something that kind of exists Thinking: now I go right on Vectorworks, I try to do as much as I can as early as I can Perceiving: I would tend to spend the first week just kind of theorising and looking online for different inspirations	Introversion: Ro.G would come to studio and sit in the quiet mezzanine area to work alone. Sensing: She liked to visualise her ideas by sketching and drawing them on CAD. Thinking: She is careful when she acts or speaks and is developing her skills to solve past issues. Perceiving: She prefers to work spontaneously and avoids pressure, but has developed practical strategies.

Student 7 is Ro.G.

Ro.G is a student from the second institution who had the **ISTP** personality in the **MBTI** test.

Her Introversion preference appeared in her constructed personal meanings, goals and approaches as an interior designer, which matches point (a). For example, she reflected on home design ideas thus:

I look online and there's really nice things, that don't look very homely, it looks more like an exhibition... I can't imagine anyone living there.' So I suppose that's my drive when I come to each project, I try to do things well, look quite cool and things, but are still very practical and could work in everyday life.

This statement shows several cognitive processes regarding the concepts and meaning of interior design, including her value of the practicality aspect of a space, more than the aesthetic aspect. Moreover, she preferred working on her own, despite the fact that her experience of teamwork was positive.

I prefer to work on my project solely, but we did have a group project recently and that worked out rather well.

She explained that she found it difficult to be listened to in groups as everyone is talking. As she had an introversion personality, she would not interrupt or involve herself in the discussion. Thus, she prefers to work on her own at home while writing her proposal, or be in a quiet zone working in the studio if she needs to work on computer software:

Not being listened to, I suppose. Not necessarily that your idea doesn't get in, it's just if there's a bunch of people and you want to comment on something, but everyone's talking...I prefer working in the studio for Vectorworks. My proposals that I do, I tend to work at home.

Regarding the Sensing preference, she engages well with tasks and becomes enthusiastic about learning and mastering a skill, as in point (b), besides which, she has an ability to absorb skills and learn drawing on CAD, which helps her to create new products and objectives which match point (c):

I really like Vectorworks – the computer programme we work with now – I really enjoy that... I really enjoy creating my own furniture I just prefer it.

Moving to the Thinking preference, which is shown in her decision-making process, she described interior design as an enjoyable field that she can study (but is not passionate about it as a Feeling student would be):

I searched for degrees in the high school, especially the beginning, of things I could do like art-, design-related and when I came across a description of an interior design course, I thought, 'Oh, that is something I would really enjoy doing...'

The last code is her Perceiving preference, which is represented in her anxiety over deadlines, which she decided to not think about because made her stressed, as in point (g):

I suppose it is a bit of anxiety because the only thing is, just having the proposal and all the rendered images look as clean as I can and make sure that the way you've presented it makes sense so I suppose having that proposal, because again this proposal's for the interim review, but I'm so going to want to clean it up and things for the final review. So the only anxiety for the final review is having the proposal that looks really good but also makes sense. So that's the only thing I work towards, I don't think about it really in the beginning, it's only really the three or two days before the deadline that I think, 'OK, I need to work on the proposal.'

This serves to illustrate her answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI.

Ro.G's Introversion preference appeared in her explanation of presenting her project in front of other students. She might feel nervous if it is a big group, and prefers smaller groups:

I really don't mind presenting in front of my peers because everyone is really nice, but I prefer it in smaller groups, because when it's everyone, I just get nervous in front of groups of people, even though they're all really nice and I know them really well.

Regarding her Sensing preference, she emphasised that it is important for her to see inspiring visuals then she can develop a concept. She described her thinking process from being inspired to designing and drawing on computer programs:

I want a visual image of something that kind of exists like that, so I'll go online and I'll find an image. And I'll find something that exactly matches what I like or it

has the same idea. And when I find that, I start building up on Vectorworks, so I'll see how it would actually work in the space using 3D tools to again make it and manipulate it.

Ro.G has shown logical, reliable and strategic decisions, which reflects her Thinking preference, for example, regarding her decision to join the interior design programme, she stated:

When I was younger I wanted to be an artist, but my brother said, 'Oh, you can't make any money doing art', so it's a good alternative, I suppose.

Finally, her openness and flexible attitude represents the Perceiving preference. However, an interesting finding shows her original preference to work spontaneously, then the combination of Perceiving and Thinking preferences have developed her strategic process to be productive in her design. The following quotation demonstrates her developing motivation to work as hard as she can, to achieve her goals by creating a mixed strategy (not following an order and not spontaneously):

Last year I would tend to spend the first week just kind of theorising and looking online for different inspirations. And I found near the end of the project I was rushing to get things to a finished-looking state. Whereas now I go right on Vectorworks, I try to do as much as I can as early as I can... just trying to get as much done, for especially the first reviews... so I'll get better feedback from that. And then, I can take it up for the end of the year.

The second verification process demonstrates **my observations** as follows.

Introversion: Ro.G would come to studio and sit in the quiet mezzanine area to work alone on her computer, with minimum interaction with peers.

Sensing: She likes to visualise her ideas by sketching and drawing them on CAD, which is why she does most of her studio time working on the computers.

Thinking: She is very when she acts or speaks and likes to be prepared for any situation or questions. She has also shown development in her skills to solve past issues.

Perceiving: She prefers to work spontaneously and avoids any pressure such as deadlines which cause her anxiety, but she has developed a practical strategy to solve this personal situation.

The Six Thinking Hats

White: Just having information like the plan at my proposal (Introversion)

Yellow: Then going through all the practical things (Sensing)

Green Problem-solving (Thinking)

Black Why this works, why this doesn't work (Thinking)

Red: If I like it, that set (Introversion)

Blue: Work and work until I finish and submit (Perceiving)

Ro.G. **defined creativity** as:




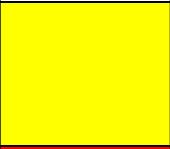
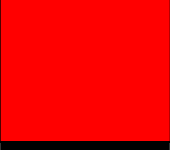
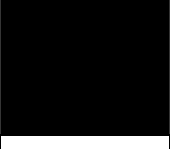

I suppose ideas that aren't the norm and pushing your ideas to their limits. So be more imaginative or just less predictable, unexpected, I suppose.

From her definition, her appreciation for changing norms and to pushing herself further to be more 'imaginative' and 'unexpected' is obvious, which reflects her ISTP personality type, as she has her own ideas and likes to visualise these ideas, by using her thinking abilities and available resources.

Conclusion

Ro.G was one of two students with an **ISTP** personality type, which has been verified by the five perspectives outlined in the introduction. The **MBTI** test result shows that her characteristics match my observations and the supplementary questions. She tries to act carefully and thoughtfully by creating a balanced working process for herself.

The **Six Thinking Hats** briefly described her personal thinking process, which, interestingly, was a mixture of imagination visualised on CAD, and practicality. The **creativity definition** stated by Ro.G emphasises her focus on pushing herself as much as possible to determine her abilities and weakness and producing unexpected objects that symbolise her implicit power of creative potential.

(21) Introversion Sensing Feeling Judging (ISFJ)				
An.C.				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
      	Creativity is about thinking outside of the box and thinking from different perspectives and using your lateral and vertical thinking.	a. Quiet, Gentle and reflective. b. Observer, careful and act confidently. c. Reserved, humble and seeking privacy. d. Usually like to look fashionable or cool. e. Talented in craft or music. f. Enjoy working hard and stable by following time structure and doing practical activities. g. Friendly and prefer working in small groups. h. Seek working in cooperative and caring environment. i. Focus on details, values and feeling. j. Work toward clear expectations to	Introversion: I like to create the productive atmosphere in, in my home Sensing: I do more sketches instead of words Feeling: the sensory experiences that the clientele can experience. Judging: I like to work by following structured plans.	Introversion: An.C is a quiet student who acts softly and gently with her peers. Sensing: She likes sketching, drawing and modelling, as well she always dresses fashionably Feeling: She is inspired by nature and is strongly linked to the natural feeling of the world and objects. Judging: She makes lists of tasks and timings to complete these tasks.

		meet known deadlines.		
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Student 8 is An.C.

An.C is one of four students holding the same personality type from the **MBTI** test: **ISFJ**. As An.C has an Introversion preference, she prefers to work alone or in small groups:

I prefer to work alone but in real life, in reality we will never work alone. We will always work as a team. So we will need to have teamwork collaborations skills. It is essential as well. But, personally I like to work alone so I can go with my ideas and not consider others' ideas.

Moreover, as an Introversion personality she finds inspiration in nature or home, when she finds personal space, which matches point (g). When she was asked about the inspiration for ideas and working on her projects she answered:

At home and nature, because it's inspires you more and it's your own space.

Her Sensing preference can be clarified through her stressing learning by doing, which matches point (e). She described her learning process through accomplishing a project:

I start to do initial sketches first and try to do just paper models and after that I refine my model, make another model and then I start to make like a real sketch or like perspective drawings and stuff. And then I do it on computer drawings on, on 3D max or on Revit, so I can see my mistakes as well.

Regarding her Feeling preference, she gave a couple of statements that indicated that she follows her feelings or heart to make decisions:

I chose to study interior design because I was always passionate about interior design, since I was small.

She chose to study interior design because she was passionate about it (not for practical reasons such as income, as other Thinking personalities stated earlier).

Regarding working at home, she stated that she would not work in the studio because she does not feel inspired enough:

Here [studio] I feel like I don't feel as much as inspired than if I were at home or in the nature.

As she is a Judging personality, she prefers structured work. She makes a time plan for each week to help her strategically manage her projects:

I like to work by following structured plans. I also start with describing with bullet points, like important ideas that I should explore and then move to the sketches...I always make time plans for each project and a very detailed one for each week, so it helps me to move forward effectively and faster

Finally, she emphasises that deadlines are important for projects. As stated in point (j), deadlines are stressful and relaxing for her at the same time: relaxing as she is prepared for them, and stressful near to the submission date:

Deadline, because I always go through my schedule and through my time plan so, I don't stress myself but still because I know how much work I need to do till the deadline and I feel like... It stresses me sometimes but not like turns my mind off, I just work harder and harder.

The previous quotations illustrated her answers of the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test.

Her Introversion preference is shown in the following statement, in addition to her Sensing and Feeling preferences as she prefers to work in a quiet environment alone to imagine, daydream and create ideas, but the way she described the details of a space shows her Sensing preference:

I think it's both because I like to create the productive atmosphere in my home, like putting nice classical music and like, putting dim lights and low light, not like fluorescent lamps, just like very low light and like create a cosy environment and so which helps me to be motivated and work productively I think that's kind of hacking your productivity... I like to work in a quiet environment but not like, an office building with grey walls

Moreover, she emphasised this point by stating that she sketches her ideas more than thinking logically about them.

I do more sketches instead of words. But I also start with describing with bullet points, so the ideas.

Moving to the Feeling preference, in her design strategy she explains that she aims to design places to be more sensory for users.

Trying to make use of each space and trying to come out with the sensory experiences that the clientele can experience.

Finally, her Judging preference shows her tendency to have a clear picture of what is required for the task.

I think the project tasks are clear to me. I think the module guide is helpful. Makes it easy to understand... I would like to work in high end residential and commercial projects. And I would like to be a successful interior designer and I would like to promote Mongolian art through my designs and be part of the interior design development in Mongolia.... I first think of the big picture of my project and then go into detail.

The following is the verification step, **my observations**.

Introversion: An.C is a quiet student who acts softly and behaves nicely with her peers and tutors.

Sensing: She likes sketching, drawing and modelling, as well she always dresses fashionably.

Feeling: She is inspired by nature and strongly linked to the natural feeling of the world and objects. She emphasises that this link gives her energy and wants to give it back to her clients.

Judging: At the beginning of each semester she makes lists of tasks with timings to complete them, and stick to these plans.

The Six Thinking Hats

Green: Because starting from the brief you have to be creative (Introversion)

Blue: Then think about the process of the project (Judging)

White: Then doing research is important to it (Introversion)

Yellow: So you can come out with good ideas, then values and benefits become important (Sensing)

Red: Then the intuition feelings and hunches (Feeling)

Black: Then the last cautions and difficulties (Judging)

An.C 's creativity definition is as follows:

Creativity is about thinking outside of the box and thinking from different perspectives and using your lateral and vertical thinking.

Her definition shows several cognitive terms and processes, which indicate her knowledge and focus on the cognitive processes of the term. She repeated 'thinking' three times in her definition and emphasised using different thinking skills to get new outcomes.

Conclusion

An.C was one of four students with the **ISFJ** personality type, which has been verified by the five perspectives in the introduction. Her set of characteristics from the **MBTI test** result match the supplementary questions and my observations. She enjoys working on projects and has constructed her own design plan to reach her goal.

The **Six Thinking Hats** briefly describes her personal thinking process which demonstrates that creativity is her first step, followed by planning. This indicates her strong Introversion and Judging preferences. The **creativity definition** reveals her implicit meaning of the term as a cognitive process and she encourages people to develop their abilities.

(22) Introversion Sensing Thinking Judging (ISTJ).				
Ji.C				
Six Thinkin g Hats	Creativity definition	MBTI personality type	Supplementar y questions	Observations of behaviours and attitudes
<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	<p>Creativity for me is to question the idea; is it going to actually work in that situation? Is there any value or benefit from actually doing it? Is it going to improve things?</p>	<p>a. Calm, serious, sensible, strict and mature.</p> <p>b. Individualisti</p> <p>c and self-control.</p> <p>c. Practical organised, dependable and traditional.</p> <p>d. Task oriented, hard worker, problem solver and risk averse.</p> <p>e. Work toward clear expectations and deadlines.</p>	<p>Introversion: I don't like working in a studio</p> <p>Sensing: I am a great one for attention to detail</p> <p>Thinking: I want to do well</p> <p>Judging: Unfortunately we have to follow plans</p>	<p>Introversion: Ji.C shows mature behaviours and serious comments and actions.</p> <p>Sensing: She brings visuals to every studio as progress of her projects.</p> <p>Thinking: she follows logical and structured actions and makes some critical comments.</p> <p>Judging: She develops a plan and worked constantly.</p>

Student 9 is Ji.C

Ji.C is one out of three students with the **(ISTJ)** personality typ. The first aspect to be discussed is **the MBTI test**, which shows that her first preference is the Introversion. She emphasised the point of working at home for being productive as it is ready and comfortable:

In my studio at home. Because it's my space, it's catered to me and I just feel comfortable and I have to feel. I, it's very important to me to feel comfortable and right.

Moving to the Sensing preference, she stated:

All through my life it's been experience, I tell you. Nothing with words
Another point emphasises her Thinking personality as she looks, at feedback as a reflection or a new insight for her project as in point (c).

I'm confident about sharing because I think you do need sort of positive and negative input to actually move anything forward and it gives you a different insight into what you're actually looking at.

Furthermore, when she receives the brief of the project she aims to understand it, to be clear exactly what she should do. This careful and risk averse characters reflects the logic of her thinking processes, in point (d).

I tend to keep it safe at times, although I'm trying to take a risk.

Lastly, she is naturally disposed to good time management practises, clear descriptions of the tasks and working steadily on time to finish the project, which are a Judging characteristics.

I'm very good at time management, yeah... I think because I've sort of, my life has been very time organised and orientated, I do it automatically... you know time to me is precious...and I don't like to waste my time

She prefers working to deadlines as she can organise her time and be prepared prior to the submission date.

I actually do work quite well to deadlines. If I know I've got a deadline. If it was a long away deadline I'd probably sort of procrastinate for the first while and then when the deadlines getting nearer but I still mentally know I've got enough time to sort it...

The previous quotations illustrate the answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test which is the second aspect in the discussion.

Ji.C. is very individualistic and serious, as in points (a) (b), which reflect the Introversion personality code. She stated:

I don't like working in a studio. I find it a very negative space, at home I've got my whole desk. I have a room the size of the garage that is my studio. And I feel more at ease working in my own space cause I've got everything where I want it to be. And this to me is not a comfortable environment for me to work in. I think because the studio is used by so many, because obviously it would be, it's, you know, I like my own personal space.

She is a Sensing person and this is reflected in her process of being inspired by pictures and visualising all her ideas, including details:

I would sort of start...computer research, getting samples and things together. I'm a great one for trying things out and putting bits up and sticking them on walls and seeing what works together and what I like together and what I don't like together. So that's probably how I sort of work. It's sort of a logical way to me, but it's probably quite random to some...I am a great one for attention to detail, but I think the attention to detail has to come after you've got the whole thing in mind

Being practical, grounded and seeking logical explanations represents her Thinking preference, which also drives her to be task oriented. Here, she explained that grades are her main focus:

Good mark. I suppose that's one of my reasons for coming back. Well, that actually isn't the only reason. I want to do well. And I've always throughout my life, if I'm going to do something, I either give it all or don't do it.

Then she stressed the importance of practicality as a fundamental pillar for creativity:

I think it would have to be, one would come with the other. I don't think you could actually differentiate between them because both are vitally important, depending on what you're working on. But you couldn't, whatever you do creatively it has to be within certain bounds unfortunately.

Discussing the Judging preference, she stated that she has developed this skill of working to plan in order to succeed in her studies.

Unfortunately we have to follow plans. I do prefer to work without total convention, but unfortunately you do have to come to structured plans in the end don't you, whatever you're doing.

From **my observations**, Ji.C shows an interesting match with the previous information:

Introversion: Ji.C shows mature behaviours and serious comments and actions.

Sensing: She brings visuals to every studio as progress of her projects.

Thinking: She follows logical and structured actions and makes some critical comments.

Judging: She has developed a plan and worked constantly.

The Six Thinking Hats

Red: When I start something I'd like to think of myself as being quite sort of intuitive and spiritual and so on and it has to feel right. If it doesn't feel right, so that's that one (Introversion).

Yellow: Then I would perhaps put my sensible head on, after I've, then I think, well, ok, is this going to actually work in that situation? Is there going to be any value or benefit from actually doing it? Is it going to improve things? (Thinking).

Green: Then I might have to come up with some alternative solutions because perhaps my original ones might be perhaps not cost effective or whatever (Sensing).

White: I suppose, then I'd need to actually inform myself about the process. So that'd be my research (Introversion).

Blue: Then I'd need to sort through the thinking. Sort through it, so I'd need to sort of look at it and perhaps adjust (Judging).

Black: Then, I suppose last and not least I do think about things if they might go wrong, but I don't tend to. I'm quite a positive person not a negative person (Thinking).

Creativity definition: Ji.C defined creativity as:

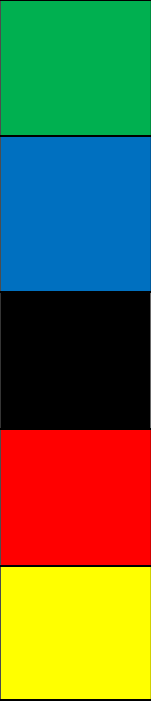
Question the idea; is it going actually to work in that situation? Is there any value or benefit from actually doing it? Is it going to improve things?

She is a grounded person, with a high motivation to achieve her goals and be successful. Her approach to navigating her goals and making valuable design decisions is questioning, which reflects her Thinking preference. In other words, she becomes motivated when she finds value in designing something.

Conclusion

Ji.C is one of three students with the **ISTJ** personality type, which has been verified by the five perspectives stated in the introduction. The **MBTI** test result shows that she has all characteristics and features of this personality type, which matches my observations and the supplementary questions. She is a strongly analytical student who is decisive and goal-orientated.

The **Six Thinking Hats** briefly described her personal thinking process, which shows an exact match with her personality type. She likes to work alone, make things alone, think alone and make decision alone. In the **creativity definition** she emphasised questioning, which shows her Thinking preference and her reliance on the yellow hat.

(23) Extraversion INTuitive Feeling Perceiving (ENFP)				
Ag.G				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
	Creativity is amazingly looking but also very practical and functional	a. Assertive and outgoing. b. Seeking fun and argumentative c. Enthusiastic and stimulating. d. Improviser and innovator. e. Cooperative and Risk taker. f. Predict impact on people. g. Discuss values and ideas in groups to generate new ideas. h. Strive to be unique, imaginative and creative. i. Spontaneous, flexible and do things at the last minute.	Extraversion: once you come to the studio, you feel like you want to do work INTuitive: once I do feel inspired, you can work non-stop Feeling: I don't like upsetting people Perceiving: I suppose maybe for more organised people it is easier to manage their time, but for me it's not	Extraversion: Ag.G is a talkative and outgoing person when dealing with other people. INTuitive: she quite often describes her ideas as a scenario happening in the place. Feeling: she seems to have good, friendly relations in the studio. Perceiving: After brainstorming and discussing projects in groups she carries on working in quiet place or at home.

Student 10 Ag.G

Ag.G is the only student with **ENFP** in the **MBTI** test. Her Extraversion preference is reflected in her tendency to work in the studio.

Very interesting... Quite exciting. It's very open, you can do whatever you want, basically. As you do a project you get a lot of guidance from tutors and that's how you learn. And that form of studying suits me well. I like it. I enjoy it.

Intuitive: according to the following statement, even her ability to imagine and improvise helps her to be an interior designer:

I suppose I have a sense for interiors. I can picture interiors in my mind without actually having to draw them down and then once I see it in my head I am able to draw it, actually with my hands... if I see an accessory of interior, I can easily put it in my head and imagine it in context. I thought everybody could do it anyway, but no because it's not that everybody can. I'm sure every interior designer can do it and that's the kind of skill interior designers should have.

Moving toward the Feelings preference, she expressed her decision-making process to study interior design, saying:

It's very difficult with design, I think, because if you are not feeling inspired, you are not going to be able to do anything.

In this previous statement, she stresses feelings (interesting, exciting, enjoying and I like it) and added that she likes drawing but she does not like using 3D CAD as she does not like working so long on modelling, which matches point (d).

I don't like working on the computer...CAD yes, I just don't like making 3D, it takes years on the computer... I really like drawing 3D. But it also depends, because for making presentations I like working on the computer.

Finally, she delivered her Perceiving preference through highlighting that deadlines are stressful but make her work harder:

It definitely doesn't turn my mind off, but it doesn't stimulate my ideas either. It just makes you work and do work. Do anything. If you're in late, it's probably a deadline. It makes you do work and it's not necessarily always good, so it's good to start early.

This illustrates her answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test, which is the second aspect in the discussion.

Her Extraversion preference appeared in her quotation as it shows tendency for teamwork and group discussion, which match points (a) and (b). She enjoys being in a cooperative atmosphere in the studio and exchanging ideas and finding inspiration:

The new building that we've got, it definitely helps because it's so beautiful and it's very inspiring. And everybody is together, so you can always discuss with other students what you're doing. It's a working environment, this place. So, it's completely different. If I stayed at home, I would get distracted all the time and do something else. But once you come to the studio, you feel like you want to do work, instead of doing something else.

Furthermore, her INtuition preference has a great impact on her attitudes and language. She emphasises the importance of inspiration in the process of designing any project:

But once I do feel inspired, you can work non-stop until the end of the project.

Another statement shows her intuition drive:

I wanted to go to S. to start off with. Just wanted to. No real reason.

From the Feeling preference, she emphasises the importance of considering others' feelings in all processes and steps of design. She described her teamwork as an emotional matrix:

In teamwork, I don't like upsetting people. I don't like saying to people that I don't like their ideas. Sometimes you have to do it and you have to do it sometimes and you have to have an explanation for why, but it's still very unpleasant. You don't want to upset anyone. With independent work though, what annoys me is that sometimes you cannot look objectively at your work and you cannot get that outside opinion if you are working on your own, unless you intentionally come to someone to ask their opinion. But in group work that's a good thing because if everyone's got a good sense of taste, good taste and they're good team players, they can work very well together.

The last personal preference is Perceiving, which is represented in her working choices: flexible, structure-free and spontaneous. She stated that she does not follow a structured plan when she designs:

I suppose maybe for more organised people it is easier to manage their time, but for me it's not. If I don't feel inspired, I can't do anything.

From **my observations**, Ag.G shows attitudes and behaviours that match her personality code.

Extraversion: Ag.G is talkative and outgoing when dealing with other people in the studio.

INtuitive: She quite often describes her ideas as a scenario happening in the place.

Feeling: She seemed to have good, friendly relationships in the studio.

Perceiving: After brainstorming and discussing projects in groups she carries on working in a quiet place or at home.

Regarding **the Six Thinking Hats**, Ag.G put them in a chronological order which is:

White: Collecting information and ideas (Extraversion).

Green: Then using these ideas to create images in my imagination (INtuitive).

Blue: Then planning what to do to deliver the scenario in her imagination (Perceiving).

Black: Solving problems and issues or modify drawbacks (Extraversion).

Red: Following the personal feeling of changes (Feeling).

Yellow: Thinking of any way for enhancement possibility (INtuitive).

Ag.G definition of Creativity is *“Creativity is amazing looking but also very practical and functional”*.

The definition shows her personal adaptation to modern perceptions of the field of interior design field: interior design is a profession that considers the aesthetic and the practicality values, as John F. Pile (2007) stated in his book *Interior Design*. Her definition reflects

stability in her individual understanding, which has been developed through the education process.

Conclusion

Ag.G is the only student with an **ENFP** personality type, which has been verified by the five perspectives stated in the introduction. The **MBTI** test result shows that she has the characteristics and features of this personality type stated in the table, which matches my observations and the supplementary questions.

The **Six Thinking Hats** describes her personal thinking process in details, which is reflected in her personality type. She is active, talkative and imaginative. In the **creativity definition**, she emphasised two values in the field: the aesthetic and practical value of the place. This understanding reflects her Judging personality that aims to clarify and determine meanings and concepts to help in planning and decision making.

(24) Extraversion INtuitive Thinking Judging (ENTJ)				
St.G				
Six Thinking Hats	Creativity definition	MBTI personality type	Supplementary questions	Observations of behaviours and attitudes
<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	The more you can think or imagine things!	a. Conceptualise , analytical and impact. b. Stubborn, conscientious and decisive. c. Plan strategically. d. Creatively problem-solve and achieve goals on time. e. Planning and working following structure toward deadline. f. A 'finisher,' reliable and trustworthy.	Extraversion: I think the studio is the best place to work INtuitive: I always start with a composite that I get from the brief, from the feel that kind of gives me Thinking: The mind-set and thinking process is completely different for the same thing. Judging: So all the work I do, I want it all sorted for the next day, so I know what I'm doing	Extraversion: St.G works from the studio all the time and is present in all discussions in the studio. INtuitive: Always wondering and seeking inspiration from different sources. Thinking: He shows critical analysis, even his actions are based on logical explanations and comments. Judging: He works in a structured manner until he finishes his project.

Student 11 is St.G

St.G. is the only student with an **ENTJ** personality type. The Extraversion person prefers networking and teamwork. He stresses the importance of discussing the design brief in the studio with his friends and tutors at the beginning of the design process, to get as wide as possible an understanding and different perspectives (a).

You learn more from each other than you do from the tutor. When you work on projects, even on your own, you can talk to others and listen to different answers in the studio environment which this place is famous for... if you're sat at your computer and didn't listen to anyone, you might spend four weeks with tunnel vision and then if someone says something that you might not like, you might think it's criticism towards you, but with the studio it works better because you can all sit on a sofa and talk about it and then go away again and think about it... you're thinking about your design in a different way.

Then he repeated that he prefers working in an active environment, which matches point (e) in the table:

I quite like an exciting, even a noisy environment, because it gets you thinking more. I think if you sit in a quiet room on your own that can be quite dull or boring.

His Intuition feeds his insight to make decisions and figure out what he wants to do and what he wants to design. First, he emphasised the value of being creative as imagination is a necessary quality for designers.

I think it's more the creativity, essentially that's more important because the more you can think or imagine things like that is going to help you throughout the rest of the course.

Later, he described the design process, which reflects his Thinking preference.

in the early steps it's really important to have contact with your tutors early on, so you can bounce ideas as well as the other people in the studio to see the big things because if you're then going to do a lot of work for that, you want to make sure it's the right thing to do, the right foundation. If you get everything right at the start, then everything is easier enough afterwards.

He also stated that he changed from architecture to interior design as the scope of the task in interior design was more what he was looking for. This statement exactly indicates point (b):

I was always interested in how people move through spaces, so I've studied architecture before, but I wanted to go into that detail that interior design goes into

Finally, St.G. is a Judging person which allows him to organise his thoughts, ideas, time and work in general and helps him submitting on time. He stated that he got this mindset of planning and structuring when he studied in the architecture program, then he developed consideration for humans needs and demands, that match point (d). He explained his process as:

I wrote a little list, put a little empty box next to it and tick off afterwards so you can see what you've done....I quite like having a structure; you feel everything is going direct. If you do too few you are going to end up with work piling up

Lastly, he stated that deadlines stimulate his motivation to think, work to submit on time (f).

I think it stimulates me to the extent where I know it has to be finished by then. So I work on it then, so it's finished. That's why I set my own deadlines as well so it keeps you at the right pace.

The previous quotations illustrated the answers to the MBTI test questions. The following quotations from my **supplementary questions** corroborate the MBTI test which is the second aspect of the discussion.

St.G's Extraversion preference appeared in the studio discussion, as he stated that it is a supporting, inspiring and encouraging space:

You can get everything you want and it's like one massive resource you can access yourself... Because you can see people doing really good work and you might think, 'Well, mine's rubbish. I want to do as well as them...I think the studio is the best place to work because I can't, sometimes if I was working at home I get distracted by the TV or even just going for a cup of coffee. But I like working on my own as well as I know that everything's so, so I can just go do it...

After that, he said that from all the descriptions in the brief his imagination was inspired that is where he starts his design, which reflect his INtuitive preference:

I sort of developed this skill in architecture and here as well, I always start with a composite that I get from the brief, from the feel that kind of gives me. So my interpretations of it, that's my big idea.

In fact, St.G. explained that interior design is more human related than architecture and that makes him more excited, enthusiastic and interested to work. This analytical process reflects his Thinking preference. He states that the main difference between architecture and interior design is the level of imagination, imagining the big picture and the details of the space that he wants to design. He designs this space and imagining himself or the client in the space.

The mind-set and thinking process is completely different for the same thing. It's quite surprising... With architecture you get your brief for the building, then you design the spaces more like a plan, so you say this room's here, that room's there and that's your overall scheme. Whereas here [interior design] you then take that a step further and then you go into like micro-architecture... I think interior design is more human-related. I think architecture's more the architect's mind and the client's budget I think whereas here interior design works better for the client and the person, That's why it excites me more, you can imagine it better.

Finally, he reflected his Judging preference in working on projects. He constructed a systematic structure to work on his projects:

I would stay in the studio straightaway when you get a brief, because you come in, read the brief, then go away to work on it, to go out and do something. So I can stay in here and that grapevine, so I like to do the work here and then leave everything, then I can come home and that's it. So all the work I do, I want it all sorted for the next day, so I know what I'm doing. When I do my list, I do like the next day.

The data from **my observation** mirrors the previous discussion. Each personality preference appeared in the studio as following:

Extraversion: St.G works from the studio all the time and is present in all discussions in the studio.

INtuitive: Always wondering and seeking inspiration from different sources.

Thinking: He shows critical analysis, and even his actions are based on logical explanations and comments.

Judging: His work follows a structure until he finishes his project.

The Six Thinking Hats

Red: The red one I would put first because you have to go with your feeling with a brief or something (INtuition).

White: Then have the white card to back that up with, information and research (Extraversion).

Black: Then probably the black one, so I can put myself into the boundary of knowing what to do properly (Thinking).

Blue: Then the blue one, so that would be me doing my list or deadlines to myself to organise it all (Judging).

Yellow: Then probably the yellow one, where I can test my theory out (Thinking).

Green: And then the green one at the end, just to explore, 'What if something's different?' (INtuitive).

His **Creativity definition** is “the more you can think or imagine things!” which perfectly reflects the preferences of Thinking and INtuitive in his point of view as ENTJ personality type. Furthermore, his implicit meaning of creativity is reflected in his behaviour, language and attitudes.

Conclusion

St.G is the only student with the **ENTJ** personality type, which has been verified by the five perspectives stated in the introduction. The **MBTI** test results show that he is characterised by all features stated in the table, which matches my observations and the supplementary questions.

The **Six Thinking Hats** presented his personal thinking process step-by-step. It reflects his personality type, as he is a mix of imaginative reflection and logical application. In the **creativity definition**, he gave a short definition that also reflected the imagination and thinking mix, which shows that he is constructed to think, act, behave and be this person.